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A FRAGMENT ON THE HUMAN MIND

Prevailing studies are of no small consequence to a State, the religion, manners, and civil Government of a country ever taking some bias from its philosophy, which affects not only the minds of its professors and students, but also the opinions of all the better sort and the practice of the whole people remotely.

. . . . . .

Has not fatalism gained ground during the general passion for the corpuscularian and mechanical philosophy? . . . .

But when it entered the Seminaries of learning as a necessary accomplishment and most important part of education, by engrossing men's thoughts and fixing their minds so much on corporeal objects and the laws of motion, it hath, however, undesignedly, indirectly, and by accident, yet not a little indisposed them for spiritual, moral, and intellectual matters. BERKELEY, *Siris*.

A FRAGMENT

ON THE

HUMAN MIND

BY

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'A HISTORY OF EUROPEAN THOUGHT IN THE NINETEENTH CENTURY,'
'RELIGION AND SCIENCE'

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PREFACE.

THERE are many defects in this little book, and many things might be said to show that these defects may form its chief interest.

With this paraphrase of a *Captatio* which has become classical in English literature, I should like to offer this Fragment to the attention of thoughtful and benevolent readers. For indeed, some apology and some explanations are needed in putting forward so incomplete and so small a contribution to the ever-increasing volume of Philosophical Writings of the present day.

As these explanations refer largely to my earlier writings and also to matters which are personal, I propose to keep them out of the text of the Treatise, bringing them together in this prefatory note. In this way they will not disturb the simple course of my argument or trouble the reader with historical references.

In the first place, I must go back to my larger work, the 'History of European Thought in the Nineteenth Century,' which was published in four volumes during the years 1896-1914. The reception of this work by the reading public has been so favour-

able, and the many shorter and longer notices have been—with one exception—so appreciative, that I feel bound to express my sincere thanks to both readers and reviewers. Some remarks have, however, been made which prove that the plan as well as the main argument of the work has not always been fully understood. The reason for this is no doubt to be found in the book itself and the incompleteness of its execution. And one of the objects I have in view in publishing the present Treatise is to give a reply to some of the very pertinent questions which have been put to me both in public notices and in private correspondence.

After a sustained but frequently interrupted occupation with philosophical studies during more than twenty years of my life, I finally, about the year 1882, fixed upon a definite subject and the title of a work which should embody the main result of the labours of a lifetime.

The first object I had in view was purely personal—it was the desire to satisfy myself as to the principal changes which had come over European Thought in the course of the nineteenth century, showing, if possible, what amount of unity and consistency had been arrived at in the three principal literatures with which I was acquainted. I thought this a necessary though laborious and absorbing preparation for the further personal object I had in view—viz., a clearer definition of my own philosophical position. But as it did not seem to me to be right to follow this out

for purely personal satisfaction, I resolved to put in writing for the benefit of others what I originally attempted merely to satisfy my own desire.

For this purpose I resolved to keep in the background all the attempts I had made to formulate for myself a definite answer to what I early considered to be the main problem of modern philosophy: the problem of the relation of Religion and Science. I therefore waited patiently to see what result would be produced in my own mind by an impartial study of those fundamental principles which in Science as well as in Philosophy and in the general aspect of Life had been slowly elaborated in the course of the century I was living in. I was not prepared to abandon the preliminary position to which I was led by my earlier studies. These centred in the works of Kant and Lotze, with a strong inclination on the one side to go back to Hume and on the other to go forward to a conception of Religion somewhat akin to that adopted by Schleiermacher, in marked opposition to the widespread but very divergent teachings of the followers of Hegel.

My school and college days fell into a period and into surroundings in which doctrines of Materialism formed the principal subject of philosophic interest. Asserted vehemently by some and more insinuatingly by others, this mode of Thought professed to be based on Science as well as on Philosophy, and brushed away ruthlessly my inherited religious beliefs. Though deeply interested in the arguments of the prominent Materialists, I instinctively turned

away from the cavalier manner in which they treated the history as well as the principles of a spiritual view of the World and Life.

As a graduate in mathematical and physical Science, I was fully aware of the enormous value of exact or mathematical Thought, which was pushing its way into all regions of natural knowledge, but I was not satisfied that the mental principles of religious life and thought were equally clearly understood.

The philosophical problem thus shaped itself in my mind as follows. Kant had put the question: How is Scientific Knowledge possible in the face of those doubts which Hume has for all time clearly laid before thoughtful and penetrating minds? It seemed to me that another and equally important question is provoked by Hume's doubts—the question, namely, How is Spiritual Thought and Knowledge possible? In both cases—in that of Science as well as in that of Religion—there was no question in my mind as to the existence of the objects of the studies, as there certainly was no doubt in Kant's mind regarding the former. The problem was not to build up scientific or spiritual knowledge, for both these existed already, but to answer the philosophical question: How are we to conceive of the human mind in its individual and social Life so as to explain the origin and growth of two regions of Thought equally necessary, though frequently in conflict in the course of human progress and culture?

Kant had attempted to answer the question: How is exact Science possible? but had left as it were a

blank in his doctrine as to the other question: How is Religion possible? Nor did I find any satisfactory answer to the latter question in the writings of either Materialists or Idealists, of whom the former explained the spiritual aspect merely as a delusion or at best as an attractive poetical creation of the human mind, whilst the Idealists evaporated, as it seemed to me, all religious truth into mere abstract notions such as the Absolute, which had not even the merit of being original. What attracted me in Lotze was mainly the position he took up in the Preface to his most original work, the 'Microcosmus.' He there promised to give as comprehensive a survey of the Mental and Spiritual World in us as, shortly before that time, Humboldt had attempted to give of the Physical World which surrounds us.

Lotze was little known in this country when I returned to it fifty years ago in order to take up practical work and make myself acquainted with other interests and other lines of thought than those which I had pursued during my school and college days abroad. Without any definite plan before me I felt sure that these new surroundings would react favourably on the clearance of my philosophical opinions. This clearance, with an accompanying change, came only very gradually in the course of my studies in connection with my larger work.

The plan of the work was explained in a lengthy Introduction to the first volume, and somewhat more precisely in the Introduction to the third volume.

I conceived of philosophical Thought as occupying an intermediate position between scientific Thought and Individual—Poetical and Religious—Thought. In its general nature I considered philosophical thought to be akin to Science, inasmuch as it proceeds by definite method: but I also conceived its relationship with poetical and religious thought as being essentially introspective. Thus philosophy agrees with science inasmuch as it proceeds methodically, but it differs from science inasmuch as the latter is based on circumspection, whereas philosophy is based on introspection.

The whole work was thus planned to comprise three sections: first, The History of Scientific Thought during the Nineteenth Century in the three countries, France, Germany, and England; second, The History of Philosophic Thought; and third, The History of Individual — Poetical and Religious — Thought. Unfortunately I have not been able to do more than complete the first two sections. Advanced years and deficient eyesight have made it impossible for me to attempt to write the third section, although before beginning to put anything in writing I had made very extensive studies in what may be called the Introspective Literature of the three countries. This has caused some misunderstanding as to the drift of the whole book and some not undeserved criticisms.

It was urged by some critics that German Thought was placed unduly in the foreground with a corresponding neglect of the large body of original

Thought in this country during the nineteenth century. This defect would have been remedied had I been permitted to write the third section. No country has such an extensive and brilliant general literature to glory in as England during the nineteenth century. The changes in the general aspect of Thought exhibited in Poetry and Fiction, in the discussion of questions of Art and Religion, have been much greater in this country than abroad.

Against the long array of philosophical poets—beginning with Wordsworth and Coleridge, and ending with Browning — who have gained or are now gaining great influence outside of their native country, Germany has to set only one name of the very first order, that of Goethe, and this belongs in considerable part to the former century.

Though France has certainly continued in the first rank in the domain of fiction and literary criticism, England has created in fiction more than one style of its own, and its influence on polite literature abroad has been, if not greater, certainly quite as great as that of France.

The great works of this country in Poetry and Fiction have also been permeated by a religious spirit and characterised by a purity of moral feeling which contrasts favourably with the materialism and flippancy which we find in much of the best writing in modern foreign literature and also in the English literature of the eighteenth century. Thus this country would have stood foremost in an attempted portraiture of that region of spontaneous Thought

which is the home of most of those leading ideas that not only develop into philosophical systems, but react also upon the deepest interests of social life.

But I cannot do more to remedy the defect referred to than point out the cause of it and refer my readers to the general Introduction and the three chapters on the "Growth and Diffusion of the Scientific Spirit" in the first volume; where it is shown that during the nineteenth century France was pre-eminently the country of pure Science, Germany of Philosophy, and England of spontaneous and individual Thought. To work out this last statement would have been for the author himself the most fascinating portion of his work.

Some of my critics have generously expressed the wish that I had given more of my own personal views when discussing impartially the various and often opposing doctrines of other thinkers. Some of them even found this studied impartiality carried so far as not infrequently to give the impression that my leanings were quite in another direction than that really and finally adopted by me.

What induced me to keep my own convictions so carefully in the background was not only a desire for impartiality in dealing with different aspects of Thought, but quite as much the fact that I was myself only gradually forming and strengthening those fundamental views which took definite shape at the end of my historical studies: only on rare occasions, and mainly towards the end of the second section, did I feel able to hint at the final con-

clusions to which I had been led. It was indeed through a process of induction that I gradually arrived at clearer definitions, which I put forward tentatively in some of the notes and in the concluding chapter of the fourth volume.

In the following brief and fragmentary Tract I try to make some amends for the defects and shortcomings which have been correctly noted by some of the most competent reviewers of the History.

Already in an Essay on the special problem the interest in which led me originally to philosophical studies, I have had occasion to enlarge on some of the points which had been suggested in the larger work. I was desirous, before it was too late, to give definite expression to the main result of my lifelong contemplation of the problem of the mutual relations of Religion and Science. What I am now attempting is to state more explicitly and in greater generality that aspect of Thought which I have made my own, and which was implied in my larger work and only sketched with a special object in the essay on 'Religion and Science.'

As this aspect of Thought follows very closely the path which British speculation had prepared for itself and followed down to the end of the eighteenth century, I cherish the hope that it will commend itself to thoughtful readers in this country to whom Continental Transcendentalism and Positivism have proved equally unattractive.

I am much indebted for help and encouragement to a few friends who have for many years taken a warm

interest in the progress of my work. Among these I may specially mention Professor Sampson, F.R.S., Astronomer-Royal of Scotland, and Dr F. B. Jevons, Master of Bishop Hatfield Hall, Durham.

Mr Thomas Whittaker, B.A., has again, with his unfailing care and ability, revised the proofs and made many valuable alterations and suggestions, for which I desire to thank him sincerely.

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INTRODUCTION.

British Philosophy during the seventeenth and eighteenth centuries acquired and maintained that individual character which entitles it to rank as one of the most important phases in the history of human thought. That in the comprehensive histories of philosophy, the independent character of British thought has not found adequate recognition may be explained by two principal causes.

First, those comprehensive histories have been written by foreign, mostly German, scholars. It is only within the last fifty years that British thinkers have studied the history of philosophic thought in its completeness, and though some important contributions to this branch of study have recently appeared in this country, they refer mostly to ancient philosophy.

The second reason for the not uncommon neglect with which British speculation as a whole has been treated abroad, is to be found in the close connection which exists between philosophy and general literature

in this country. This makes it difficult for foreigners to appreciate a body of thought which is essentially home-grown. Expressed in the vernacular and even in popular language, it has a close alliance with the practical problems as well as the literary tastes of its native country.

After the age of Francis Bacon, Hobbes, and Newton, whose works were either published in the cosmopolitan Latin tongue, or made their way on the Continent through translation into it, we come upon three leading thinkers who governed British thought. They came respectively from the three separate countries which constitute the United Kingdom, and have stamped their respective character upon their writings. Locke, with his plain historical method, came from the south-west of England; the imaginative Berkeley came from Ireland; whilst Hume represents the subtlety of the Scottish mind in its most clarified form. These three thinkers, who form a close succession, received much from Continental and earlier mediæval and ancient thinkers, but this provoked rather than hampered their originality. And in return, in spite of the neglect just mentioned, they gave more than they received. But what they gave consisted more in definite well-marked doctrines which had a stimulating effect on foreign thought than in any general impression from that original and independent method and line of thought which they had made their own.

This special line of thought came to an end, after the influence of Hume in this country had somewhat subsided, in James Mill and the Scottish school. James Mill led on to John Stuart Mill, who abandoned the

plain historical method of Locke, attracted as he was by the method of the natural and inductive sciences; whilst in the Scottish school the erudition of Dugald Stewart, and still more of Sir William Hamilton, afforded to British students a glimpse of the then comparatively unknown exploits of transcendental philosophy in France and Germany.

The subject-matter of the classical school of British thought was the human mind or human nature in the whole circumference of its appearance within the larger world of external nature. It was, in fact, a study of the microcosm of mind as distinguished from the macrocosm of nature, and its method was the "method of ideas." As such, it was primarily introspective.

The titles of the great works of the three leaders in this specifically British line of thought nearly all show the comprehensive plan of their proposed investigations, and with the exception of morals, which always formed a matter of special and detached interest in this country, the authors do not care to divide up their research into separate well-marked sciences, such as Psychology, Logic, Metaphysics, and Theory of Knowledge, conventional in foreign philosophical treatises. This comprehensive and independent study of the human mind or human nature did not, however, escape the influence of the contemporary study of the outer world, the fruitful beginnings of which started somewhat earlier in this country, though Newton's great work, 'The Principia,' and Locke's 'Essay,' appeared within the same decade of the seventeenth century.

And thus we find that after the middle of the eighteenth century, when Hume had brought the "method

of ideas" to an *impasse*, the analytical and dissecting process of thought which had led to such great results in natural philosophy gained the upper hand, with the result that the human mind suffered, as it were, disintegration through research after the manner in which natural things were dissected and divided under the hands of special students.

James Mill, in his 'Analysis of the Phenomena of the Human Mind,' follows "the same method as that by which any department of nature might be studied. Mental phenomena are reduced to their simplest elements, and the association of these into groups and successions is investigated." [1] This means that research is conducted by the combined methods of analysis and synthesis.

Other critics of the "method of ideas" found the cause of its failure or exhaustion to lie in the fact that ideas cannot be isolated like physical things and their constituent particles, and that a study of their combination in judgments must form the beginning of philosophical inquiry. This led necessarily to the study of the connection of thoughts—*i.e.*, of logic—a step which had been independently taken by the greatest critic of Hume on the Continent, by Kant.

This line of inquiry was, however, not consistently followed in this country till much later. In its stead, the doctrine of the association of ideas—*i.e.*, of the synthesis of the elements of thought—became for a time dominant, mainly through the writings of Alexander Bain, to which John Stuart Mill gave his hearty

[1] W. R. Sorley in 'Cambridge History of English Literature,' vol. xiv., chap. i., p. 5.

support. The position of Bain is distinguished likewise by his introduction of the study of the physiological phenomena connected with mental processes, in which line of research he was influenced by the work of Continental students. But Bain did not turn his back upon that method which had become characteristic of British philosophy; he conceived it in a larger sense as the "introspective method" rather than as the "method of ideas," and, in one of his last deliverances, still upheld it as by far the most important in the domain of what was now called psychology.

In the meantime, contact with the natural sciences on the one side and with Continental thought on the other affected British philosophy very powerfully in several ways. Among these the most noticeable is the importation of those new aspects which had gradually come out in the study of nature, and which found their most pointed expression in this country in the writings of Spencer, Darwin, and Huxley. The phenomena of the outer world, notably those of the living creation, ceased to be studied in isolation. Their interconnection in space and time attracted special attention. Environment and development became watchwords in research and categories of thought.

This way of looking at natural phenomena found its classical expression in the doctrine of evolution, which will always be connected with the name of Herbert Spencer; it became so popular as to permeate not only all philosophical writings but every branch of literature and research, both on a large and on a restricted scale. The idea was so comprehensive

and attractive that it even brought under its sway the opposite tendency of thought which, following the lines adopted by Continental writers, aimed at combating the naturalistic and agnostic doctrines which seemed to be the first-fruits of the genetic study of natural phenomena.

This latter tendency of thought connected itself with the revival at Oxford of logical studies through the influence of Mill. Not only was the study of Aristotle continued and enlivened by a new spirit, but the larger and deeper conception of logic, peculiar to Hegel's system, attracted the notice of original minds, and led to a new school variously termed Idealist, Transcendentalist, or Neo-Hegelian. These two distinct currents of thought, the agnostic of Spencer and Huxley and the transcendentalist of Oxford, fill the second half of the nineteenth century in this country. In both schools we feel ourselves to be in an entirely different atmosphere from that which surrounded the introspective thought of previous centuries. In Oxford itself, Locke, Berkeley, and Hume were not appraised at their true value, and it was left to Scottish thinkers, notably to Campbell Fraser and his followers, who had continued the specifically British tradition, to lead back to a better understanding of the plain historical method, and to a comprehensive study of the human mind.

The vitality of the introspective school of thought is nowhere shown to greater advantage than in the style of their writings, which is at once clear and elegant, avoiding both the mystification of the transcendentalists and the delusive plausibility gained by

an introduction of physical analogies into the discussion of purely mental phenomena.

Largely owing to the writings of this school, but likewise also to the latest phases of transcendentalism and the reaction which they produced in English and American philosophic thought, it seems possible to take a broader view of the introspective method; defining it more clearly and continuing it in immediate connection with Berkeley and Hume. This was indicated in the last chapter of the author's 'History of European Thought in the Nineteenth Century'; and the method has been applied to a special problem in an essay entitled 'Religion and Science'

CHAPTER I.

THE INTROSPECTIVE METHOD.

I.

Modern Philosophy, as distinguished from Mediæval Philosophy, is usually dated from Descartes. He may be said to have inaugurated the introspective as distinguished from the metaphysical or dialectical point of view as the beginning of all fruitful mental philosophy. Without entering into minute details, the difference between these two points of view may be stated as follows.

The adult thinking mind at that advanced stage of civilisation when and where philosophy becomes a desideratum if not a necessity, finds itself in possession of a large number of abstract terms. Such terms, words, or phrases are in general currency among thinking persons, and are used in very various ways. They are employed to prove certain statements of a general character, and they are equally used to disprove these same statements. Through this very different use of the same terms a general confusion arises, and this on its part leads to distrust and scepticism. In Greece a special art came into existence which purposed to show up this general uncertainty

which pervades all discussions on abstract and general subjects. Those who practised this art most successfully professed to be in possession of such wisdom as was attainable, and so were called "Sophists" or professors of "Sophia."

The first prominent historical appearance of the "Sophistic" phase of thought was among the Greeks. But the appearance of the Sophists called forth a further advance in abstract reasoning, and the object of this was to fix the meaning of those abstract words and terms which were in general accepted and used without a clear definition of what is meant by them. This new phase or manner of thought was in antiquity termed "dialectic"; in modern times it is called "criticism." It led in due course to two distinct branches of philosophy: Logic and Metaphysic. And these two distinct sciences reacted again upon the earlier dialectic, making it more intricate, and as was thought, a more powerful instrument of research. In reality, though the dialectic of the Schoolmen and of Hegel is much more refined and difficult than that contained in the Socratic Dialogues of Plato, the main characteristics of the process remain the same. It is a process of cross-examination, not unlike that which is carried on in the Law Courts of to-day, or which the solitary thinker may carry on in the form of self-questioning. The aim of the process is to attain two fixed points. The first point is clearness and consistency of thought, as expressed in the words of language. The second is agreement between different persons; just as in a legal trial the Judge, with the help of Counsel and through cross-examination, tries to arrive at a

consistent statement, and then expects the Jury to agree in their verdict.

The aim of dialectic or criticism in philosophy is thus to establish consistency of thought and agreement with others.

II.

The historical development of this dialectic method, though it led to great refinement of thought, proved, nevertheless, in the course of many centuries, to be incapable of securing the two points just mentioned, namely, consistency and agreement of thought, and it was therefore natural that thinking minds should ponder over the causes of this failure and seek for a different method of procedure. This different method was first clearly practised in the Natural Sciences.

In the domain of these the discussion of words and terms of language was gradually superseded by direct observation of things, and by a new language provided by mathematics, and based ultimately on geometry. This change secured at once the definition of the object dealt with, and as this was accessible to every one, the desired agreement of thought. Inasmuch, however, as this abandoning of words in favour of facts and symbols was only applicable to what is termed the outer world—*i.e.*, Things in Space—the task of philosophy was only half solved.

The thinker who first clearly recognised the gradual change which had come over the sciences, through

their escape from the thraldom and tyranny of words into the open air of things and facts, and who pointed out that this was the only safe road towards Natural Knowledge, was Francis Bacon. And this will mark for all time his position and importance in the history of Thought. But though he was in addition possessed of much worldly wisdom, and a master in giving expression to the same, he was not himself an adept in the new language of the sciences: he did not recognise the importance of Mathematics, and he still more failed to realise that, by the new movement, the whole task of philosophy had not been performed or even approached. He did indeed allow that there were other questions comprised under the general term Theology which were of importance, but his attitude towards them was never clearly defined. What Francis Bacon never attempted was done somewhat later by Descartes in France.

III.

Descartes agreed with Bacon in condemning the dialectical method as practised by the Schoolmen. But his objection to it and his scepticism rested upon a different ground. Whilst Bacon denounced these methods as not leading to Knowledge—notably Natural Knowledge—Descartes denounced them because they did not lead to certainty. He was the first thinker in whose arguments we can trace a clear distinction between certainty and exactness of thought. This is an important point. In order to be useful

and progressive it is sufficient for Knowledge to be clearly defined and generally accepted. Consistency (or coherence) and concurrence (or agreement) in thought is sufficient to make it a powerful agent in progress.

Whole generations of civilised history and culture, great societies of human beings, have existed and thriven under the sway of systems of thought and knowledge which, though consistent and universally accepted, have to future generations and other societies seemed to be full of superstition or error. And even at the present day we have by no means got beyond the possibility of such wholesale delusions and consequent condemnation.

In the course of this search for certainty, for something that cannot be doubted, Descartes took a memorable step in advance: discarding words and phrases, he penetrated beyond and beneath them, recognising that, quite apart from the nature or meaning of words as such, they referred to an inner process in every individual mind. This process is thinking. Even if all our knowledge were reduced to uncertainty and dissolved in doubt, there still remained as the remnant which we cannot get rid of, our doubting itself; and doubting is thinking. Thus the only certain thing is thinking. Had Descartes remained there and recognised what this statement implied, he would have not only discovered but cultivated the large region of the inner world—the world or stream of consciousness. Instead of doing this he fell back into the old tracks of thought: he resorted again to metaphysics and dialectics. Instead of saying, thinking or thought

exists, he said, because thought exists therefore I exist. This statement contained an important truth — the truth, namely, that every one can be certain only of his own thoughts; but it conceals a hidden assumption, namely, that thinking implies something or somebody who thinks.

This, of course, is the common-sense view—the view of which all the dialectics and metaphysics of ancient and mediæval times could not rid themselves. It took a hundred years of further thought before Berkeley and Hume between them showed that the existence of a process, be this external motion or internal motion (that is, thought), though it suggests to us a something which moves or thinks, leaves this something undefinable, and that our knowledge of it is reduced to the simple fact of motion and thought.

As Descartes did not recognise the real importance of his step in advance, but brought in the idea of a Something which lies beneath or behind the thinking process, he retained the metaphysical notion of substance, and in the sequel arrived at the notion of two substances—the inner thinking substance and the outer extended substance. By opening out this track of thought he became the father of a long series of philosophical systems on the Continent, which adopted in the main the old dialectical method, leaving aside the introspective region of research which he had had a glimpse of.

IV.

There was indeed an inducement for Descartes to desert the straight road which was indicated by the important step he took. This inducement did not exist for readers of his 'Discourse' in this country as much as it did abroad. Philosophy abroad conceived its highest task to be the establishment of a reasoned creed which should settle the doctrinal controversies raised through the Reformation. In this country philosophy was not appealed to in the same interest. The object of philosophy in this country was not a quest of faith but a quest of Knowledge, and essentially practical and useful Knowledge. It was therefore likely that the new road opened out by Descartes would be followed in this country rather than on the Continent. It was followed out by Locke, who adopted what he termed the plain historical method: he searched more closely within his own mind for the origin of the contents of thinking, that is, of ideas: and he directed his argument against the theory that ideas were innate or inborn, and maintained that they had their origin in the process of perception or experience, the mind being originally like a *tabula rasa* or clean sheet of paper. This constitutes a second and most important step in advance. But he did not thereby get rid of the terms, Mind and Matter, as denoting special entities or substances. He, however, occupied himself most with the thinking process—that is, with the different thoughts which it contains or produces. Maintaining that these arose from perceptions or sensations, he started to

analyse the latter, notably so far as they appear to us to reveal the properties or qualities of external things. In the sequel he divided these sensations into two classes, which he regarded as indicating the primary and the secondary properties of things: for men of science had noted that many of the so-called properties were changeable, purely in the precipient and as it were accidental, and as it seemed did not affect the existence and nature of the things themselves which were extended, possessing figure, solidity, and the like. These latter, the primary qualities, he conceived as belonging to the things themselves, whereas the secondary qualities, such as colour, sound, temperature, taste, and smell, were merely the manner in which things affect us.

The next important step in following the psychological train of thought as distinguished from the dialectical, was taken by Bishop Berkeley, who showed that the primary qualities of Locke were no more than the secondary, known as independent of our personal sensations; that our ideas of them were equally elements in our thinking process; and that they therefore taught us nothing about matter—that is, about the independent substance of external things. In the further course of his speculations he consistently dropped the idea of Matter as quite unnecessary, inasmuch as things external existed for us only in our thoughts and ideas.

V.

It will be seen from the foregoing that although English thinkers emphasised the mental process and did not follow Descartes in the attempt to define the essence or substance of Mind and Matter, they nevertheless did not abandon altogether the notion implied in the common-sense view of the subject, that Matter and Mind were two independent things, apart from their properties, which consisted for us human beings in their different ways of affecting us—that is, in our ideas concerning them.

Before going any further, it is only fair to say that Continental thought, as carried on by Descartes' successors, such as Malebranche, Spinoza, and Leibniz, no more than English thought, followed consistently the road he had taken. For, with their purely dialectical and metaphysical discussion upon Substance or Substances, they combined a considerable amount of pure psychology. Further, Locke's analysis reacted upon Continental thought, and notably in the celebrated controversy between Locke and Leibniz a further very important step was taken.

This controversy was carried on in a correspondence between Leibniz and Dr Clarke, a follower of Locke and Newton, and further elucidated in Leibniz' work, discussing the views of Locke under his title, 'Concerning Human Understanding'; which, however, was not published before the middle of the eighteenth century. The gist of the whole controversy is concisely expressed in a Latin phrase which, like the

cogito ergo sum of Descartes and the *tabula rasa* of Locke, forms a landmark in modern thought. The human mind being compared to a clean slate, the view of Locke was expressed in the dictum *Nihil est in intellectu quod non prius fuerit in sensu.* He thus not only looks upon the mind as a substance, but considers it also to have two compartments or parts: the intellect which contains ideas, and the senses which contain impressions and perceptions. And he maintained that ideas or thoughts refer only to sense-impressions, and can add nothing to the contents of the latter. To this Leibniz assented, if to the dictum were added the words: *nisi intellectus ipse.* By this addition he urged the truth that the sense-impressions could not be converted into ideas without a Something which retains, converts, and arranges, in fact elaborates them. He therefore adopts the view of the mind as substance which Locke had retained, pointing out, however, that there must be a difference between the same contents as given by the senses and as thought of by the intellect. He thus set the problem of deciding wherein this difference consists.

The further step beyond Locke which Berkeley took, pointing out that we have nothing beyond ideas of sense to correspond to what we call matter — the external and extended substance—was not followed up by Continental thinkers, neither by Leibniz nor by the French School of Condillac, who professed to be followers of Locke. The consequence was that Continental thinkers held on still more persistently to the metaphysical or scholastic notion of substance. And it was not till a further step had been taken beyond

Berkeley that the introspective strain of British thought made an impression upon thinkers abroad.

This further step was taken by David Hume, who, agreeing with Berkeley that we cannot find in our experience any sensation which can be the foundation for the idea of material substance, added the further reflection that we can as little find within our mental experience any sensation or perception which would form the foundation for the idea of a spiritual or thinking substance, but only various sensations which we fictitiously attribute to an independent entity called Mind, Spirit, or the Self.

VI.

The consequence of this unanswerable contention of Hume made it quite as impossible to uphold the Berkeleyan theory that all is spirit or mind, as it had appeared to Berkeley to uphold the position held by Locke and Descartes, that, in addition to the thinking substance, there existed a material or extended substance. This, added to various other criticisms by Hume, which we need not discuss for our present purpose, created a sort of *impasse* in the development of philosophical thought, out of which Hume himself, and still more his successor, Thomas Reid, sought an outlet by appealing to common-sense.

On the Continent Kant was "wakened out of his dogmatic slumbers" by reading one of Hume's writings. He faced boldly the dilemma which Hume had established, and somewhat contemptuously condemning

Reid's position, resorted to the dialectical method which he termed "critical."

Whatever the difficulties might be in laying bare the foundations of knowledge, there could be no doubt that knowledge existed, and though much of it, as Bacon and Descartes had shown, was uncertain, futile, or useless, yet a certain amount of it was undisputed, notably that which rested not only on observation, but in addition upon the unchallenged method of mathematics. Following this reflection, Kant betook himself to examine and analyse such knowledge.

Agreeing with the dictum of Locke as amplified by Leibniz, he fixed it as the main task of philosophy to show what the thinking mind (or intellect) would require to add to the material given by the senses in order to convert it into a coherent and convincing system of thought deserving the name of knowledge.

In carrying out this program, he again reverted to the expression which knowledge had obtained in language. Here he found ready what had been termed since Aristotle the forms of logical judgment, in addition to the two forms of order, space and time, in which all our experience comes and appears to us. These forms of order, with the logical categories which he took from the forms of judgment, appeared to him to be the contribution which the intellect makes to the material supplied by the senses, converting the latter into knowledge.

But though Kant accepted the position of Hume that we could know nothing of substances such as Matter and Mind, but only of their properties which constituted their appearance to us, he did not abandon the concep-

tion of external things, but allowed it to stand in the form of an unknown something called "the thing in itself." This mysterious unknown something became in the sequel the central notion from which Kant's followers started in their speculations.

Two direct answers were given to this question, "What is the thing in itself?" They were both reached by the simple reflection that the mind, being itself an existent, must look within for a definition of the nature of existence.

Schopenhauer claimed to have discovered this in the Will. Hegel, after a long dialectical argument, carried on by Fichte, Schelling, and himself, confirmed, though in somewhat different words, Descartes' initial statement that Reality is Thought. Both these thinkers elaborated and illustrated their respective central ideas in a series of writings covering many regions of natural and historical facts and events.

Scholars who are acquainted with the works of German thinkers from Kant to Hegel, may with some propriety object to this summary statement of the outcome of that long dialectical process of thought which started with Kant and ended with Hegel, and it would not only be a mistake to deny the enormous historical importance of that great school of thought, but still more so, to overlook the fruitfulness of the many suggestions and side-lights which are thrown out in their writings. If nothing else, they succeeded in raising philosophical thought to a much higher and broader plane than that which it occupied even when cultivated by the comprehensive mind of Leibniz. But nevertheless it must be admitted that, looked at from

the point of view which we have taken up, this whole movement of thought known as the Idealistic or Transcendental movement, led away from that plain historical way which Locke had indicated. It must also be admitted that both Hegel and Schopenhauer left the whole development at a point beyond which there seemed no possibility of progress, unless we recognise as legitimate the attempt —due notably to von Hartmann — to reconcile the two outstanding conceptions contained in Hegel's and Schopenhauer's respective systems. This latter attempt was certainly not in the spirit of either of those two thinkers, as they both agreed in holding that they had reached a sort of finality beyond which no radically new step was possible.

To a great extent it must also be plain to every student of these Transcendental Systems that it is extremely difficult to arrive at a clear understanding of many very important passages — so much so that different historians and expounders have been able to put very different meanings into the words of the great masters. Perhaps, however, an exception must be made for the writings of Schopenhauer, who, in contrast to the others, cultivated a lucid and elegant style which did much to popularise his doctrine.

So far as Kant, Fichte, and Hegel are concerned, they invented a style of their own, added a large number of new terms to the already overloaded vocabulary bequeathed by ancient and mediæval thinkers, and indulged in a forbidding phraseology which appeared to many readers a deliberate mystification.

VII.

Looking broadly at the whole development of philosophical thought, especially in Germany, we are struck by the absence of clear definitions of the many words and phrases in which the various doctrines are presented to us. To take only two examples: the word "mind" is used in many different senses, sometimes denoting the "individual mind," sometimes the "general or universal mind"; it is sometimes opposed to "body," sometimes to "nature or matter"; the adjectives denoting it signifying sometimes "mental" and sometimes "spiritual."

Again the word "self," which in post-Kantian philosophy appeared as the I or ego, stands sometimes for that inner region of our being which is known only to each individual; sometimes it must mean the external appearance of our being as one among many not-selves, and these not-selves may be either things or other selves. A still greater ambiguity prevails in the use of terms such as "Reason," "Understanding," "Sensations," and "Thought." These terms sometimes appear as representing different parts of the mental life, sometimes as generic names for mental processes.

Compared with these complicated structures, built up by German thinkers, the philosophy of this country appears extremely simple, and was regarded by some of the Transcendentalists abroad as childish and trivial. The complicated structures of German

thinkers, their varied terminology and the ambiguous meaning of their language, joined to the many schools of thought, created, in the German mind, a feeling of confusion and unsettlement which in many cases led to a despair as to the possibility of arriving at any reasoned creed which would command general assent, and be of use in dealing with the burning questions of the day. Practical persons accordingly treated philosophy with indifference, and thinking minds bestowed their labour on the more promising fields of scientific or historical research.

The only two philosophers of eminence who attempted to bring some order into the chaos of philosophical thought itself, did not for a long time gain that recognition which their efforts deserved, and never rose to that popular renown which surrounded the names of their great predecessors; but they paved the way for new departures. The two thinkers I refer to are Lotze and Schleiermacher. The latter, though the earlier in time, and a landmark in theology, is even at the present day hardly appreciated as a leader in philosophical thought; whereas Lotze's merits have been increasingly recognised, not only in Germany, but also in this country and beyond the Atlantic.

Schleiermacher and Lotze were thinkers of very different stamp, and the former had little influence on the latter, but they both employed the dialectical method, not without a considerable admixture of good psychology. They both emphasised in different ways the claims of feeling or the emotional side of our nature as an independent source in conjunction with

the intellectual and the volitional side which had been unduly urged by Hegel and Schopenhauer.

We must now turn to the state of philosophical thought in this country.

Little original work was done after the Scottish thinkers had settled down to expound, in answer to Hume's scepticism, the philosophy of common-sense. The only line of thought indicated already by Hume himself which gave some promise, was the treatment of mental phenomena by analogy with those of the physical world.

This resulted in a sort of "mental chemistry" which was elaborated under the conception of the Association of Ideas.

The only branch of pure philosophy which received special attention and original treatment was Ethics, and this treatment was carried on by a dialectical process which found its greatest representative towards the end of the century in Henry Sidgwick.

VIII.

In general we may say that the Introspective Method of dealing with the phenomena of the human mind was not abandoned, although it was temporarily pushed into the background. From many sides it received tacit encouragement; so much so that we are now able to state more definitely wherein the fallacies consisted through which it was arrested shortly after the time of Hume. The first comprehensive critic of Hume's Philosophy, Thomas Reid, called the method

the "Ideal Method." By others it was called the method or Theory of Ideas, inasmuch as "Ideas" were considered to be the elements of Thought, and an analysis of them was expected to lead to a better understanding of the nature of the human mind. There is no doubt that this method of Ideas was suggested to Locke by the practice of the Natural Sciences, where definite things are studied in their isolation, and dissected into their parts.

It was not recognised before Reid pointed it out clearly that Ideas cannot be isolated like natural objects; that their definition is difficult, and that a dissection of them into parts is wellnigh impossible. Thus it becomes necessary to adopt a different point of view, and to start, not with the isolated and naked idea, but with the complexes or clusters in which ideas present themselves to the introspective view, and to recognise that the inner life of the human mind is a "connected totality" of which a section only presents itself to the inner view at any moment of time, this section changing continuously.

To express and fix this method two terms were introduced by two thinkers who have revolutionised the philosophy of the human mind within the English School. William James dilates on the "stream of Thought," and James Ward on the "continuum of Presentations." These terms are suggestive, but we still require another word which shall concisely characterise the modern as distinguished from the earlier form of the introspective method. This term has been used in Continental literature to designate a general aspect which came into view in some of the natural sciences.

The German language uses the word *Anschauung* to denote an attitude of thought which is only awkwardly rendered by the English words "Sight" and "Intuition." It implies that we look at things, physical or mental, in their natural connection, as they present themselves to our total view.

Goethe, who was gifted with an unusual poetical as well as scientific insight into Nature, complained that naturalists were too much bent upon analysing and dissecting the objects of their study; but his remarks were little heeded at the time. Somewhat later, Comte in France, when approaching, in his Course of Lectures on Positive Philosophy, the biological sciences, insisted on the different aspect of the living as compared with the lifeless creation, remarking that the former demanded the *vue d'ensemble* for its comprehension. We may render this term which gives a more definite expression to Goethe's idea by the word Synopsis (seeing together), contrasting this attitude of the reflecting mind with the combined process of Analysis and Synthesis.

If Comte found it necessary to recommend this *vue d'ensemble* or Synoptic View to students of living things, it is still more necessary to resort to it in the study of the Inner Life. Introspection is primarily Synoptic and only secondarily Analytic and Synthetic.

We may, therefore, lay it down as a first rule for any introspective inquiry that it must regard its object synoptically.

This Synopsis, or seeing Things Together and not in isolation, applies to two different methods which were introduced into the study of Nature in the middle of the

nineteenth century and combined in the Philosophy of Evolution. Briefly stated, it means that we must look at Things as they present themselves together both in Space and in Time. We must look not only at their surroundings or environment, but also at their temporal succession or change. The latter leads to the genetic view.

Thus, if we apply this to mental Things or Ideas, we must not only look at the company of other Ideas in which single Ideas present themselves to us, but we must also look at their origin and development.

IX.

This genesis of ideas can be studied in two ways, which correspond to the two ways in which living things in the outer World have been studied, more especially in recent times. The genesis or history of any individual Thing may be either a history of descent or a history of its own individual growth. Thus, Ideas may be studied in their origin and development in the course of generations and centuries, going back, if possible, to their early appearance among primitive or savage races. But they may also be studied in their separate growth in the individual life, and traced back to their first appearance in the infant mind.

These two methods may be mutually helpful. The former method has found much favour in the many recent and elaborate works on Ethnology. The other

method, which is Introspective, is the one to which we shall give special attention in this Treatise.

There is a third aspect of mental phenomena which has been urged in modern studies of human nature, and which we may also bring under the general head of the Synoptic aspect.

The individual mind of any adult person is usually considered to be self-contained and independent of the minds of other persons. It is forgotten that this independence or individuality has only been gained in the advancing years of adolescence, and that even then it is to a large extent only apparent. It is impossible for me in my thoughts to isolate myself completely from the thoughts of other persons with whom I associate, and any train of reflection which I may carry on ever so secretly and in seclusion is very largely influenced by the thoughts of others, which are in many ways communicated to me through personal intercourse or through spoken and written words. Still more is this influence of other minds noticeable in younger persons, and the further we go back in our individual history, the more we find ourselves living in an atmosphere of feelings, impressions, and thoughts derived from others, which surrounds us in the various and changing circles in which we move from the nursery, through the life of the home and family, on to that of the school and college. This influence depends on what has been termed intersubjective communion.

This intersubjective communion of different minds with each other lasts all through life, though in a decreasing degree, so that it may be neglected if we deal with the adult mind; but it cannot be left out of

consideration if we trace our ideas and feelings—in fact, the whole of our experience—back to its origin and growth in earlier years.

The introspective view thus bids us look on what we may call our individual and personal mind as largely a product of the influence of other minds. We must, in fact, look upon our own mind and its experiences synoptically, not as an isolated unit of inner life, but as a compound produced by innumerable and mostly indescribable influences and contributions of other minds.

This leads us to speak of the mind and mental life in general, though each person and each thinker can really know only his own mind in its totality and changing history. Thus Kant, *e.g.*, introduces the phrase *die Vernunft überhaupt—i.e.*, the intellect in general; and a similar use of the words Mind, Understanding, Reason, &c., is quite common—in fact, indispensable—though writers on mental Philosophy often fail to give a clear explanation of what is really meant by this usage.

Summing up the foregoing, we may urge definitely three points of view which the Introspective and Synoptic aspect bids us bear in mind in our studies of the inner World:—

(1) the interconnection of ideas or mental experiences;
(2) the change and growth of these experiences; and
(3) the communion of individual minds.

It is on these three lines of thought that we shall dwell especially in the following pages.

It is not, however, intended to convey the idea that the point of view here mentioned marks the only correct way of dealing with the phenomena of mind. Other methods, such as the psycho-physical or the older

psychological method, have done and are still doing useful work in the exploration of mental phenomena. What is said, therefore, in the following pages, professes to be only a small contribution to a large body of research, filling in recent times many important treatises, some of them ponderous volumes filled with minute investigations.

CHAPTER II.

THE FIRMAMENT OF THOUGHT.

I.

From what has been said in the foregoing chapter, it will be clear to the reader that we shall not open our discussion by dealing with detailed facts of the inner life or by dividing the totality of the same either into faculties or into ideas. We shall follow the example set by James Ward and William James, and begin by looking at the mental life or the human mind as a whole possessing continuity and a continuous change or flow of various experiences. We may then look out for a term which designates the nature of continuity and change in our mental life.

As all discussions concerning the inner world have to be carried on in the words and language which we find current, and which we can change only to a very small extent, it is important to bear in mind that most of the words and phrases which we are forced to use are derived from things of the outer world, and used only metaphorically to describe facts and events of the inner world. Like all metaphors and analogies, the words we thus use become misleading if carried too far or understood literally.

Though we may be grateful to the two thinkers mentioned for introducing these novel phrases with the purpose of giving a new turn to mental philosophy, it will be useful to indicate where the metaphors they have chosen lose their meaning and are apt to mislead us. The "stream or flow of thought," so happily chosen by William James to designate the unceasing change of our inner experiences by comparing it to the flow of a river, does not take note of the fact that in a river the special features such as waves, eddies, and whirls, &c., never recur in the same way, and can therefore not be individually dwelt on. In the stream of our inner experiences, be they thoughts, sensations, or feelings, definite aspects recur ever and again. If it were not so, our experience would be like that of a traveller in a railway train who views the landscape through which he passes only hurriedly, no single aspect recurring in order to receive any fixation or permanence.

Again, if we take James Ward's suggestive statement that we are, when looking introspectively, aware of a continuum of sensations or movements, we must at once add that this continuity exists only during our waking hours, and is then ever and anon broken—though not beyond recovery — by discontinuities in the form of sudden surprises or even of intervals which seem to us void and empty.

In order to avoid any misunderstanding of our conception of the nature of mind, we shall in the sequel make frequent use of a different metaphor and compare the aspect of our inner world with that of the starry heavens if we gaze at them in the night-time. We

shall speak of this inner region as the "Firmament of Thought," contrasting and comparing it with the physical firmament.

In using this metaphor we employ the word Thought in the widest sense, as any experience of our mind, be this experience Thought in the narrower sense of the word or Sensation, Feeling, Desire, &c. All these we comprise under the term Thought, just as in speaking of the external world we may call every appearance a Thing, though in the narrower sense of the word this may not be correct or conventional.

Employing the terms Thought and Thing in this general way, we may say that the physical Firmament is filled with various Things more or less distinct and more or less permanent. In the same way we may say that the mental Firmament is filled with thoughts more or less distinct but only slightly endowed with permanence. Observation leads us thus to a first distinction between the physical and the mental firmament or horizon.

Thoughts in the widest sense of the word have little permanence and many of them little definition; whereas what we call external Things have a large amount of permanent and clear definition. Again, both the Things of the outer and the Thoughts of the inner world recur—*i.e.*, they disappear and come back again, but the recurrence of Thoughts of any kind is less certain and less regular than that of Things outside of us.

We may thus note a further important difference between the outer and the inner worlds, inasmuch as the former presents to a large extent order and regular-

ity, whereas the latter seems fleeting, difficult to arrest, and even when recurring, never in exactly the same manner.

Another characteristic which Thoughts and Things have in common is this, that if they disappear out of our horizon we consider many of them to be preserved somehow or somewhere—the former in Memory, the latter in a comprehensive arrangement which we call Space. But whilst Space and the Things in it represent a comprehensive and orderly totality, each Thing having a definite location, the contents of memory are extremely uncertain, though from ancient times one has been accustomed to the use of the metaphor "the Tables of Memory."

II.

So far we have spoken of two worlds, the outer and the inner, and it is in accordance with popular usage that we contrast these two worlds. And yet, if we look more closely, we find that this contrast cannot be consistently maintained, inasmuch as there seems to be no proper dividing line—the two worlds standing not as it were opposite each other but rather in a relation such as night and day. These also are contrasted in ordinary speech, yet a real dividing line cannot be found, and at the confines they merge into each other, twilight and dusk belonging to both.

In the same way we find that the outer world in a certain sense belongs to the inner world, and that the inner world, though in a different manner, plays a part

in the outer world. This is easily expressed and recognised in popular language. Things of the outer world belong to the inner world in the form of Sensations or Images, and the totality of the inner world seems to be in some way located in the outer world—so much so that we recognise in the outer world two classes of Things which we term Inanimate and Animated or, in scientific language, Inorganic and Organic. The exact relation between things of the outer world and the sensations or thoughts which represent them in the inner world cannot be accurately stated, and the popular as well as the scientific mind has many ways of describing it though none of these ways is universally accepted.

The position of mind or the inner world has always been recognised as a puzzle. Nevertheless, we are in the habit of speaking both of Life and of Mind as definite Things.

The fact that the outer and the inner world are thus inseparable, their connection at both ends, as it were, being for our understanding vague and perplexing—has led to much confusion in philosophy. And it took thousands of years before any attempt was made to lay down a workable definition of the difference between the two worlds.

For our purposes we will adopt a definition which has been arrived at in more recent times and of which we find no distinct expression in the philosophy of earlier times. We shall say that the outer world comprises everything which we not only individually experience, but which can also be experienced by other persons. And we shall call the inner world that portion of our

total experience which every individual personality possesses for itself and which is hidden from other persons.

III.

The progress of Human Thought in the course of History, has lain in the direction of accentuating more and more the difference of the outer and the inner worlds. Thus Descartes, the founder of Modern Philosophy, fixed this difference as that between the extended and the thinking Substance, prescribing to Continental philosophy through this distinction a definite line of speculation.

It is not our present object to point out the merits or defects of this definition. But there is no doubt that this step, as well as other steps which followed it, led more and more to a separation of two regions of existence which are originally and naturally closely connected and interwoven; and it has become for us more difficult to realise this natural and intrinsic union than it was in philosophy and general literature in earlier times.

This has been a loss so far as the philosophy of the human mind is concerned, but it has proved to be the essential condition for the foundation and the growth of natural philosophy.

Whereas in antiquity natural and mental philosophy were closely connected and interwoven, it has been the work of the last three centuries to bring about an ever clearer demarcation of these two formerly connected regions of research—so much so, that we have now not

only natural as distinguished from mental philosophy, but in the former a further separation marked by the use of the terms, the Exact as distinguished from the Natural Sciences.

And the tendency has become more and more marked to regard the Exact Sciences as the model of Natural Knowledge, their method being increasingly applied to all regions of the outer world.

This great gain, so far as pure Science is concerned, has, however, not been secured without a sacrifice and a limitation of the domain of science. For it has been found that not all the phenomena of the outer world, and hardly any mental phenomena, are capable of that strict definition which is the first requisite of the exact method of research; of that method which permits us not only to describe and explain but also to predict and even to create, phenomena.

All attempts to extend this valuable exact method beyond the region of those facts and events which take place in space have been more or less doomed to failure. The only exception has been, in comparatively modern times, the independent growth and development of the art of musical composition. Practically without the assistance of any exact science, this wonderful creation of the human mind has sprung up, unfolding to us quite a new world of which Antiquity and even the earlier Middle Ages seem to have had only the faintest idea.

We may truly say that in the same degree as research has become more scientific and more exact, leaving on one side the vaguer, but more interesting, phenomena of the inner life, the emotions, the joys,

the sorrows and aspirations of the human soul; the world of musical sound has deepened and expanded its own language for describing and penetrating into those secluded regions.

Historians of Music have pointed out that that century during which Exact Science was firmly established upon an independent basis, the seventeenth century, witnessed also the great revolution in the art of musical composition. "This period," says Zamminer,[1] "witnessed also the blossoming of an Art which has now like no other permeated all spheres of life, and has become a real requisite of civilization; Music, liberating itself in the seventeenth century from the more rigid rules of the older counter-point and from the limits of Church Song, rose to fuller life."

And similarly Parry[2] describes this great revolution in musical composition in terms which with little alteration might be applied to the evolution of contemporary Science.

It is not a little interesting to see how many persons who take a Rationalistic or even a Materialistic view of life, find recreation and consolation in listening to or performing those musical creations which have sprung from the soul of artists who lived in the spiritual world.

It is, however, possible to take a different view of the progress and development of human thought in recent times. Whilst admitting that the aspect of the world nowadays does not present to the thinking

[1] F. Zamminer 'Die Musik und die Musikalischen Instrumente,' Giessen, 1855.

[2] Sir H. Parry in the Introduction to the third volume of 'The Oxford History of Music,' 1902.

mind, trained in the school of Modern Science, that unity and harmony which belonged to a more youthful or childlike period of civilisation, and that it has become difficult to take that cheerful view which meets us in some of the finest products of Grecian literature, art and even philosophy, we must on deeper reflection also admit that the more recent developments of philosophic thought point to a new conception of that central point of view which we seem to have been on the point of losing for a time. To this we must now give our attention.

IV.

In order to understand how human thought after effecting the disruption of those two worlds—the outer and the inner which common experience always presents to us interwoven with each other—is now again attempting to bring about a unification on a higher level, it will be necessary for the reader to grasp the following thesis :—

All knowledge, of whatever kind it may be, is contained for every individual person within the range of his own consciousness. The horizon of any person's mind contains everything that exists so far as he is concerned. There is nothing in the world for any of us but that which we in some way or other mentally experience — such experience being of various kinds, such as Sensations, Perceptions, Ideas, Emotions, Desires, Volitions or Feelings in general. These all together in their existence within our consciousness

form the only content of our knowledge, and outside of them there is for us no knowledge and no world.

Anything of which we can have neither a Sensation nor an Idea, nor an Image nor a feeling of any kind, does not exist for us—it does not belong to the world as we know it. Everything that exists for us must be a feature in the stream of thought, must enter into the continuum of mental experience, must have, to use our metaphor, a location at some moment or for some time in the firmament of our thoughts, or — to use the more popular expression—of our Soul. Any one who nowadays enters upon the study of philosophy must realise this first all-important truth. It is hardly necessary to dwell on this any further.

Every person can by self-observation and self-interrogation assure himself of its correctness.

This truth is contained in Descartes' dictum, that the only thing which exists beyond doubt for every one of us is his own thoughts, taking the word thought, as stated above, in the widest sense as anything and everything that happens in our own consciousness.

This truth which stands at the entrance of modern philosophy and has governed in various ways its whole subsequent course, received definitive expression in the last great system which has exercised permanent influence on modern thought. The Hegelian system lends *prima facie* plausibility to the higher truth that for us human beings there is essentially only one form or category of existence—viz., Thought or Spirit.

This way of introducing the subject of the following pages may seem paradoxical, and it will be the object of our primary consideration to explain more fully

the real meaning of this seeming paradox and to draw some further conclusions.

Thoughtful readers will probably admit that all our knowledge is within the confines of our individual experience, that it is primarily all personal; but they will add that nevertheless there is a marked difference, which common-sense describes by the contrast between outer and inner, external and internal, physical and mental.

A portion of the experiences of our conscious life is not only subjective but also objective, by which latter term we mean that these have an existence outside and independent of our respective individual selves. They could not indeed exist for us individually except they were a portion of our subjective experience; but they are in addition to this something more, as we know by communion with our fellow-men, who describe to us experiences so similar to our own that we are for practical purposes led to call them the same. By far the greater portion of our conduct in the course of our life is based upon this conviction.

In fact, we extend the conviction, gained primarily through communion with other persons, so as to assign to things and events contained in this common experience an existence quite independent of any mental experience at all, be it our own or that of other persons.

We objectify a portion of the total contents of our individual consciousness, calling it the external or, *par excellence*, the Real World, and contrast it with that other portion which we term the Inner World, and which, though possessed of some kind of reality, seems to have less of it than the former portion.

This conviction is very much strengthened by the ordinary occupations of our life, which consist to a large extent, and with many of us almost exclusively, in dealings with or acting among other persons; and even when we retire into the sanctuary of our own individual thoughts, we find these again almost exclusively occupied with memory pictures of what we term our external life. And though it is the special task of mental philosophers—be they scientific, philosophical or purely literary—to take special cognisance of the subjective side of our experience, it has always proved extremely difficult to carry through this introspective view consistently, and not to lapse again and again into a contemplation of the external world.

The reasons of this are manifold, and some of them quite obvious, but there is one circumstance which stands out prominently.

Psychologists, to whichever of the above-mentioned classes they belong, whether students of psycho-physics, introspective thinkers or psychological novelists, deal almost exclusively with the adult mind. This induces them to attach most importance to mental features and abilities which have been acquired in the course of adolescence, but many of which are much less marked or perhaps totally absent if we go back to the period of childhood or infancy.

This remark leads us on to a contemplation of mental phenomena from a point of view which has been rarely occupied but which seems to throw a new light upon the paradox mentioned above.

V.

Before entering upon this unusual line of purely introspective contemplation, it will be interesting to return for a moment to the popularly accepted view that there are two distinct worlds or firmaments—the physical and the mental; two series of events—the physical outside of us, which comprises our own bodies, and the mental inside of us, which comprises the outer world in the form of Thought or Knowledge.

We will now note two fundamental differences in the nature of these two, as it seems to us, independent streams of events.

The first may be expressed in a second important thesis, which we wish to impress on the minds of our readers.

The outer world or universe is a continuum. It exhibits no breaks and no gaps: the inner world on the contrary is full of discontinuities, that is, of breaks and gaps.

The latter part of this thesis will probably be readily admitted. Not only does every individual consciousness begin in time and, so far as we can observe it, end abruptly, but it is characterised by periodic lapses into non-existence in the form of sleep, and though preserved by memory, even the limited duration of any individual consciousness could probably not be maintained without those periodic intervals of rest or non-existence.

And further, our waking hours are full of breaks and discontinuities, and would cease to be of any

interest to us if such breaks were destroyed, and monotony or uniformity reigned throughout. Such a state would become tedious and intolerable, leading probably to weakened consciousness, and ultimately to its temporary or permanent disappearance.

It is more difficult to maintain the first part of our thesis, which in the emphatic statement in which we have given it, belongs only to recent times, though the natural philosophy of older times had already arrived at the two well-known adages of the *horror vacui* and *natura non facit saltum.* It is, however, only within the last hundred years that the doctrine of the continuity of a substance which fills all space, of the uniformity of nature, and of the slow progress of changes and variations, has formed one of the leading features in the theory of evolution.

And yet just at the moment when continuity has been pronounced to be a supreme rule in the natural order of things, when space has been filled with a continuous substance and the organic creation declared to be a product of imperceptible variations; natural philosophers have, once again, resorted to the older hypothesis of the atomic nature of physical things, involving action at a distance, and have filled space with corpuscles flying about, while naturalists have invented the term Mutations in order to explain the sudden appearance of new species.

This may be so; yet the fact remains that the mathematical treatment of single phenomena is only possible on the assumption of continuity of some kind. In the visible world of living things, on the contrary, the vital principle seems bound up with discontinuity.

For the latter reason we are forced to the conclusion that all those principles which govern the purely scientific or exact study of the outer world, such as the uniformity of the laws of Nature, the rigid sequence of Cause and Effect, and the continuity of Matter and Motion, refer only to a portion of that world as we see it, and that they leave untouched those features which are most prominent in the everyday aspect of the world which surrounds us.

They represent the properties of a framework or skeleton which science, after thousands of years, has only in quite recent times been able to discover and to strip of that engaging drapery of changing colours, sounds, and manifold impressions which meets the glance of every one who looks round with his natural senses, and which it is the prerogative and special task of the artist to grasp and impress upon our minds.

And thus we find in the early period of that revolution in Science which has led to the foundation and elaboration of the mechanical view of Nature a special doctrine advanced which distinguishes between the primary, more permanent and more definable, qualities of external things and the secondary which stand, as it were, between the rigid features of mechanism and the continually changing and rapidly fleeting events of our inner life.

It is also well to note that whilst every individual soul may be able to take a full and comprehensive view of the natural world which surrounds it, it is impossible for any single person to experience through direct observation the intricate though regular lines

and features of that mechanical framework which has been elaborated in the course of the centuries by the co-operation of thousands of observers and thinkers.

The actual experience of even the most comprehensive scientific mind contains at any moment only a few traces of that inwoven cypher which we now believe to pervade the whole of Reality from the largest to the smallest dimensions.

VI.

But there is another distinctive feature which marks even more emphatically the difference between the outer and the inner worlds. This feature is indeed visible enough, and yet, strange to say, it has only in quite recent times been clearly defined by philosophers. It may be described in the following thesis :—

> The outer world or the physical firmanent is now conceived to be characterised by the conservation of certain factors or principles which constitute its real essence, such being subject neither to increase nor decrease, showing neither loss nor gain but only transformation and rearrangement. Contrary to this, the inner world is continually growing, this growth forming its characteristic nature.

No one will deny that the activity and the interests of the mind are very different in different persons; further, that this activity and these interests have grown enormously in the course of the history of civilised humanity, and have been perpetuated in the multifarious products of culture. The latter begin with the

earliest forms of social life, its customs, laws, and order; its combined labour and thought setting out from the useful and advancing to the Fine Arts, acquiring definite features through Poetry, Literature, and Art as well as the later products of Science with its manifold applications.

All these are creations which continually increase, forming quite a new world—the world of Thought in the widest sense of the word. Though much is lost in the progress of centuries, the growth of this inner world is unmistakable. The amount of crude material used in the creation of this new and continually extending world is comparatively infinitesimal and has not lost any of its natural properties. The same small amount of material and of physical labour which through the genius of a sculptor and a painter has produced a Venus of Milo or a Sixtina might have served a savage to produce a meaningless effigy or a daub on the canvas, creating in the latter case nothing new, whilst in the former a whole world of beauty and a joy for ever has come into being. Nor have we any reason to believe that the total mental energy which has been employed in making physical matter become the bearer of mental creations, has in any way diminished the total amount of physical energy in the outer world.

In fact, the totality of what we term Culture or Civilisation, its manifestations and products, is a creation out of nothing and would again disappear into nothing if no human minds existed who could understand and assimilate it. Its whole existence, so far as our outlook is concerned, is only in and for them.

This circumstance, which must be patent to every one,

has found in modern philosophy two distinct formulations. It has been described by Wilhelm Wundt as "the growth of mental energy" as compared with the mere conservation of physical energy. The same fact finds expression in the writings of Alfred Fouillée in the conception of the *Idées-Forces*, according to which every idea which arises in the human mind is a creative centre.

These terms are suggestive: for our purpose it seems desirable to choose a different word to mark more distinctly this characteristic difference between the outer and the inner worlds. The word Energy implies some similarity between the processes which are active in the two spheres of existence. We shall therefore in the sequel, in order to mark the contrast according to which outer things and events appear to have a permanence of their own kind, whereas the products of mental activity exist only in and for human beings, call the things of the inner world Values and those of the outer world simply Things. We shall thus contrast the World of Values with the World of Things, and maintain that in the latter there is neither gain nor loss, whereas in the former there is a continual increase or gain.

And here again, as in the case of Continuity, we are bound to limit the principle of the conservation of Matter and Motion (or of Mass and Energy) to finite regions of the outer world. For it is impossible to put any sense into this statement if we regard the Universe as having no limits but stretching out as a whole into the infinity of Space.

We may now sum up the main characteristics, as we

see them, of the inner world by saying that it is an unending stream or a changing firmament of Thought, that it contains the whole of the outer world in the form of Thought, that it escapes the modern method of the Exact Sciences, exhibiting in opposition to the outer world the two characteristics of discontinuity and of unlimited growth.

In using the introspective method, we shall have to bear in mind constantly these characteristics of the Firmament of Thought.

CHAPTER III.

OF EXISTENCE, REALITY, AND VALUE.

I.

In the foregoing pages we have adhered to the popular or common-sense view that there are two distinct worlds or regions of existence—the outer World and the inner World. At the same time we have maintained that the outer World or the physical universe exists for every one of us individually only in so far as each one of us is able to think about it or to experience it in some form or other, be it as Sensations, Perceptions, Ideas, Feelings, Desires, Volitions, or any other conscious state by whatever term we may describe it.

The most general term which comprises all these different forms of inner existence is Experience, and we may thus call the inner World the world of Conscious Experience. No existence of any kind whatever, whether it appear to be very near to us or very far removed, exists for us at all except it has or had at some time a place in the all-comprehensive stream of our thoughts or in the changing firmament of our consciousness.

This fact can be brought home to unbelieving beginners in philosophy by the following contemplation.

The totality of our thoughts, sensations, or in general our experiences, at any moment is a limited aggregate, changing continually. Anything we may fix our attention on occupies a definite place within this circumference, and must expel something else in order to find a place in this circuit or field of thought. The field of thought is in the course of our life continually growing, but mostly only through memory. How many different and distinct features or experiences the whole of our experience may at any moment have is a question almost impossible to decide. They may be different in different persons, but that there is a great number of features can hardly be denied.

But just as little can it be denied that this number is limited, and that for every new-comer, some other or others have to make room.

Thus, for instance, a definite feeling, be this what we term bodily or mental, may drive out of our field of consciousness or experience the perception of a special thing; and again, the sudden appearance within this field of a sound or a flash of lightning may make us forget a pain we are suffering from. A landscape spread out before our view may pass unnoticed if we are occupied by some absorbing train of thought, built up entirely out of reminiscences.

It does not seem that the perceptions of our physical senses differ in this respect from mere creations of our imagination or objects of our desire. Any of these very different kinds of experience may drive out the other, engross us at one moment and be chased away the next. In fact, all our experiences lie as it were on the same plane. A lover with the image of the

beloved object before him, the aspiring politician with a lively picture of his ambitious aim filling his mind, may be quite oblivious of scenes and occurrences which absolutely engross the attention and fill the minds of others near him.

Using the metaphor which we introduced in the foregoing and calling the whole expanse of our inner field of vision the firmament of Thought, we may draw some inferences from the analogy with the aspect of the starry heavens which suggested this expression.

In both instances the total expanse presents corresponding and similar features. Both firmaments, "the starry heavens" as well as the "field of inner vision," appear unlimited, possessing a more or less definite central portion which, all round, shades away into a dim horizon: only that portion upon which our gaze is fixed appears more or less definite and clear. And here we discover in both cases features marked by greater distinctions either singly or in clusters, and these we find surrounded by, or imbedded in, a background of shade or darkness.

If we gaze at the starry heavens two impressions seem to be suggested: the impression of a grand whole and all-comprising totality; but just as much also the impression of definite lustrous points or larger bodies. And some of the latter arrange themselves into definite structures called constellations; and though they pass away out of our sight, we find on repeated trial that they come back again: their appearance is periodical and recurrent.

Similarly and correspondingly, our inner field of vision or experience appears at one time as a totality,

as a whole, at another time as a disorderly collection of definite experiences, parts, or features; and lastly, some of these are clustered together and return or recur in the same order and arrangement.

Employing the terminology which we have used above, we may say that in both cases, in that of the physical as well as in that of the mental firmament, we may conceive the object of our contemplation either analytically or synoptically. We may look at single parts and features, isolating them from the whole, or we may look at them in that connection and arrangement which they naturally present to our first glance.

We may also combine the isolated and abstracted details of our observation into complexes or clusters which are different from those which they originally present to our gaze. This process is termed Synthesis, and it forms, together with Analysis, the leading method of scientific research. It is, however, important to note that although we desire, in the process of synthesis, to come nearer to the actual arrangement of the features which are given to us, we are never able completely, or even approximately, to recover the original aspect from which we started. This is gained only, if at all, not by thought in the narrower sense of the word, but by sight. It is Synoptical, that is, seeing things Together; it means being absorbed in, and at one with, the Whole.

The needs of practical life and the methods of science continually exact from us the abandonment of the Synoptic view, of the whole firmament of our thoughts. In the same way the history of astronomical knowledge shows how this started by a study of the simpler

movements of definite things in the heavens, such as the rising and setting of the sun and moon, the recurrent appearance of the planets, their number, the conjunction and eclipses of the sun and moon, or the still rarer appearance of comets. But when this chapter of stellar science had been successfully written and was drawing to something like an end, the astronomer looked back again at other events and features of the starry firmament and opened out new lines of research, taking in other phenomena, such as those of light, colour, and heat, the movements of seemingly stationary objects, such as double stars, the changing face of the sun and moon, the erratic behaviour of meteorites, and many other objects which formed new and special fields of research. All this progress was possible only, and stimulated through, a recurrent synoptic glance, taking in the whole and overlooking nothing in the whole of the starry expanse.

A still more striking example of what the human mind can achieve by leaving behind it the laborious collections of single objects of nature, the artificial classification and arrangement of specimens, and looking out into the great expanse of the natural world —that is, by abandoning the analytic and synthetic method and resorting to the synoptic view, is to be found in the birth of the modern science of Biology, which we have already glanced at.

II.

The "firmament of thought," the all-comprising experience which contains in its slow and recurrent changes the whole of the world and existence, so far as this is accessible to us, presents the same alternation between analysis and synthesis on the one side and continually repeated synopsis on the other.

It is a remarkable fact that Hume, in his study of the Human Understanding, confined himself to analysing and dissecting the content of our mind, and to the processes of artificial bringing together, that is, of synthesis and association of ideas; that he seems to have overlooked the original order or setting in which these ideas occur and their totality or ensemble. Descartes seems to have taken a wider view of the philosophical task when he laid down his "Regulæ" or rules of method. The first three of these mark the three stages of thought just mentioned, defining them as: first, immediate evidence; second, division; and third, order. Now order or arrangement is not an idea derived from single definite sensations or perceptions; it is a something that remains in our mind, even if we neglect or forget the single elements which are arranged; it is what we retain of the comprehensive glance at a multitude of elements, or of the totality which the synoptic view revealed.

This totality or ensemble of what at any moment constitutes the firmament of our thoughts grows richer, wider, and more intricate in detail and order, as our experience grows: this enrichment is owing to memory

of former states which we conceive as continuously connected and coherent with the immediate present; and it is thus much larger and wider than the present, but also much less defined and clear in its remoter regions. The immediate present seems to be contained within the larger area of our whole past, so far as memory has preserved or can regain it.

This latter region appears, therefore, as a dim background with less defined features. From it stands out what we experience and take in at any moment; and so we establish involuntarily a difference between what we see clearly before us, and the larger and vaguer background which we nevertheless always feel with less or greater vividness.

This larger background, in which we conceive the present experience to be located, we call our Self: it is identical with the total experience before us, including the vivid present and the dimmer past; and being much larger, wider, and deeper, changing continuously, taking in what is new, but not altogether relinquishing what is old, it forms the plane of reference of our experience.

The language of common-sense shows clearly that our Self is identical with that whole of experience which constitutes at any moment our inner firmament: when it is ranging over a large area, full of reminiscences, the immediate present dwindles into a small compass, or is absolutely unnoticed; whilst at other times startling sensations absorb the whole of our attention and contract our view so much that the larger and dimmer background becomes still more obscure, the feeling of it vanishes, and we have lost our Self in an absorbing present.

In common parlance, we call the Self I or Ego, and oppose it to what is immediately before us, because we are dimly conscious that it is much larger and wider than any momentary experience.

Nevertheless what we at any time know of it, its existence and essence for us, is simply our experience in its totality.

And so we may call it the "experient" and contrast it with our experience. But, in reality, the two are identical, as expressed in the following equation:

Experient = Experience.

As often as we regard our experience as a whole, and any momentary experience as a portion of this whole, we take the synoptic view and call it our Self or Ego. Whenever we fix our attention on what is immediately before us, singling out as we usually do some portion, some parts or features within it, we call it our experience, referring it as something else to our total experience or our Self. The difference then between Experient and Experience is that the same thing appears to us either as one or as many.

To this idea of the Self we shall return later on in a different connection. At present we have to note the fact that although all our knowledge refers ultimately to experiences which we have had in the past, and although, outside of the totality of this experience, nothing really exists for us, we are nevertheless compelled to speak of an external experience as forming a special part in the totality of our whole experience, and are equally compelled to give this outer experience a separate existence, maintaining that it has, as

it were, a double existence, not only as a portion of our own total experience, but somewhere else in a special world which we call Space.

The things in this other world we call real things, and distinguish them from their existence at some time or other within the world of Thought. This latter form of existence we call their appearance.

We thus have two forms of existence: first, that kind of existence which belongs to everything which enters the field of our consciousness, which is, or has been at some time, a feature in the firmament of Thought. And secondly, we have the world of Real Things which, though known to us only through the first form of existence, possess, we are convinced, an existence when they are not present in our consciousness, when they do not return to us through memory. We distinguish between Appearance and Reality, that is, between that which simply exists and that which has, in addition to existence, Reality.

Of this difference or duality of existence which some of our experiences possess we have no doubt in practical life. The very fact that language has two words which both express Existence is an indication that there are at least two different forms of Existence.

That these two forms are in common life and speech not consistently kept asunder, but treated very frequently as identical, does not extinguish the real difference; but it indicates that this difference is difficult to define, and that the boundary between bare Existence and Reality is not clearly marked.

The words Existence and Reality are promiscuously

used to denote the same thing, and even in strictly philosophical writings there is no fixed and authorised usage.

For our purposes we shall use the word Existence in the wider sense as comprising Everything, and we shall limit the use of the words Real and Reality to such things as have a double existence, that is, to what we are convinced has an additional existence outside our consciousness. The latter are, in fact, not only appearances to us, that is, personal experiences, but have, in addition, an existence of their own.

The difference is clearly marked if we take special instances. Things of the outer world such as Stones, Trees, Mountains, Stars, Animals, Human Beings, &c., exist in space and are called real things. They also exist for us as our Sensations, Impressions, Perceptions or mental Images.

On the other side there are a great many things which exist only if we think of them, to which, however, we attribute no reality. Extreme cases of this kind are Dreams, Fancies, Errors, Falsehoods, Lies, &c. That the latter exist there is as little doubt in our minds as with regard to the former, but we do not call them Real, they seem to exist only in our thoughts about them.

And again, there are Sensations or Thoughts in the widest sense which only exist for us individually but to which we are accustomed to attribute Reality, though not in the same sense as we attribute reality to things of the outer world. Among such experiences are, for instance, pleasure and pain. Nobody will deny that a severe toothache is a very real thing, though

one would not admit that it had any existence outside of our consciousness.

We will not in this connection dwell any further on these differences between the larger conception of Existence and the more limited idea of Reality, but will remark only that the facts just mentioned indicate that Reality has *prima facie* various forms and degrees. Of these we shall speak in the sequel.

III.

Taking the words Existence and Reality in the sense just defined, we may say that Existence has, strictly speaking, for each one of us no negative. No one of us can say, this Thing does not exist, for the simple reason that to speak or think of it at all, it must in some definite or indefinite form be in our mind. On the other hand, we are continually making statements to the effect that such and such a thing is not real, meaning by this, that it has not a double existence, that it has no existence outside of our thought about it.

We may be tempted to say that certain things, be they Sensations, Ideas, Feelings or any other experience, do not exist for another mind. Thus, we may say that colour does not exist for a blind man, but the blind man cannot correctly say, "Colour does not exist for me," because he does not know what colour is. The word colour, if he uses it at all, is only a sound which he has learned from others who are not blind, but it conveys no meaning to him, and his knowledge of it is limited to

a repetition or recollection of a certain sound in the speech of others.

Another important remark is that Experiences may lose or acquire Reality through some process or other; their existence, being primarily only a Sensation or Idea in our individual mind, may acquire or lose Reality, that is, outer existence, in various ways. This we will not investigate further at the moment, but will only give a few examples.

We may in the dead of the night hear a noise which wakens us and which we are apt to take for the explosion of a bomb; it therefore figures in our mind as a real occurrence, but on inquiry amongst our friends and neighbours we find that nothing has happened, and that no other person has heard the sound. We then conclude that we have merely dreamt it; the event from being a real event in the outer world falls back into our inner world as a merely personal experience. It loses Reality but not Existence.

Another instance is that of the so-called *mouches volantes*. These are things which pass before our eyes and which we take for real flies or flying midges till we, in some way or other, find out that they are purely subjective personal experiences in our sight-organs. They thus cease to be called real or objective and become purely subjective. They lose Reality.

It may here be argued that they are not quite the same as an imagination, illusion, or delusion, as something real has happened which we could locate in space. This indicates the varying forms of things we call real.

An illustration of a Thought or Idea which exists for one mind only, but acquires Reality, being transferred

as it were from the larger sphere of mere existence to the narrower but more distinct sphere of external Reality, may be found in the process of the discovery of a new star or planet, in which also several stages of Reality may be distinguished. The planet Neptune existed in the mind of Adams as well as independently in the mind of Leverrier before it could be said truly that it existed in Reality, that is, in the heavens. But when Gallé, on the suggestion of Leverrier, looked for it and found it with his telescope within a certain constellation, it became a Reality, whereas before that it was either a mere idea or possibly a point on the stellar chart of its inventor or discoverer.

A still more impressive illustration of the wandering of purely personal experiences into the region of Reality where they acquire a fuller and larger existence may be found in the case of many convictions, ideals, or beliefs which, being primarily purely personal, become more vivid and more real through our imparting them to others among our fellow-men. Thus, a political ideal may acquire Reality by becoming the watchword of a party; a philosophical creed may gain reality, force, and vividness, by being imparted to and embraced by a school of pupils and followers; and the most sacred belief, a religious faith, becomes stronger and more real in the exercises of public worship or even only through the presence of surroundings in which other persons and things are felt to point all to a common object of reverence and adoration.

These examples show how things may move from one sphere of existence to another, losing or gaining Reality

through various causes. And they suggest the fact, which we shall discuss later on, that Reality has various phases and degrees. We shall also have to inquire into the criteria of Reality and its different forms.

IV.

The term Reality has, independently of the various phases and degrees of existence which it suggests, received another very important and striking extension or pregnancy of meaning; both consciously and unconsciously in the common usage of language, as also in some of the earliest systems of philosophy.

It was notably Plato who, to express this mode of thought, invented the term, ὄντως ὄν, which designates not only that which is real but that which is really or truly real. And this conception of the truly real has all through subsequent philosophical writings played a great part. It is important to dwell on this further distinction and limitation of that which exists primarily in our mind, but further, not only in our mind but apparently also outside of it. In this outside region of thought existence has acquired for us a still more weighty meaning.

Experiences, such as Sensations or Ideas, may, as we have seen, acquire for us the narrower but more pregnant attribute of Reality or real Existence, forming in their aggregate or totality a seemingly independent world, a real world, as distinguished from, and yet incorporated in, the purely mental region of thought. We shall see

later on that this greater distinctness is mostly acquired by a personal experience when it becomes associated with other real things, entering, as it were, into another complex of existence with a distinct but different location, whilst at the same time not losing its place in the all-comprehensive world of thought or personal experience.

It is, however, possible, not only for purely personal experiences, be they Sensations, Ideas, or Feelings, but also for real or external things to acquire additional reality by being associated with other purely mental experiences, notably such as those of pleasure or pain, of joy or sorrow, of liking or disliking—in fact, those purely internal experiences which we term Feelings in the narrower sense of the word or Emotions and, in general, Interests. Both purely mental experiences and external or real things may become interesting to us through being surrounded by an emotional fringe or atmosphere. For this attribute language has coined the term Value. Experiences, both inner and outer, may become valuable to and for us, rousing, as they present themselves, emotional feelings which do not belong to them in their naked form and which they may acquire, retain or lose again, according to the various occasions on which they arise.

We thus come to the conclusion that Existence may not only refer to simple experiences which are purely personal, but may be or become real, and, still further, may become interesting or valuable, such value being of very different degrees or forms.

In general we may say that any individual mind or person attains to a higher, wider, and deeper life in the same degree as it has a greater number of interests,

not only becoming possessed of a larger inventory of present recurring and stored experiences, but also viewing its inner and outer experiences with a larger number of interests accompanying them, as they recur with deeper and more varied feelings and emotions.

Existence then for us has three distinct phases : mere Existence as a mental experience, Reality as a double and more pregnant form of existence, and Value as the highest form of existence. And we might be tempted to go a step further, and to say that for the adult and fully developed mind there exists a frequent, though not invariable, movement of thought between these three regions of existence. Many things which acquire Reality for us in the course of life exist primarily as mere thoughts or internal sensations which strive to acquire Reality, that is, independent existence, without losing their primary existence in our mind. This is a process of externalising or objectifying in order to project, as it were, and through manifold means and processes, frequently accidental, throw outside of us and make real purely personal Sensations, Ideas or other mental experiences such as Desires and Volitions. And after seeing ourselves surrounded by what we call a real world, we clothe many of its things and events with a special attribute of interest; they become valuable to us.

This attribute of Value, which is purely personal, becomes, owing to the reverse process of taking things back into the inner and secluded region of our thoughts, a process of absorbing them without destroying their independent existence. Perhaps in this double process of externalising and reabsorbing in a more real form the various experiences had during our life, we may see an

exemplification of that triad which forms the celebrated dialectical evolution in Hegel's System: the Self, the not-Self, and the absorption of the not-Self in a higher and richer Self. We thus conclude that there are three worlds of existence—simple existence, which is purely personal, real existence in an outer world, and reappearance in an inner world of Value.

CHAPTER IV.

OF THE SELF AND OTHER SELVES.

I.

It may be that I have carried my readers so far with me, but it is quite certain that they will not be satisfied, and that there is something wanting in the description. Though they may admit, somewhat reluctantly, that all our knowledge and experience is one, a changing whole, our inner self, and that this inner self contains everything, so far as it is known to us, yet they will assert that there are many experients or other selves besides our own self.

It will therefore be necessary to explain how we arrive at this knowledge of other selves, seeing that, according to our foregoing statement, we cannot get outside of the circumference or the firmament, that is, the totality of our inner world.

And secondly, they will probably maintain that in speaking of our Self, we mean something more compact and solid than the momentary events which constitute our immediate experience, and which are embedded in the shadowy environment of changing and fleeting memories. What we have so far described as our Self appears on reflection to be only one side of this I or

Ego, and hardly to deserve the name Self, if deprived of a multitude of other selves which surround us, reducing the wide expanse and all-embracing Totality which we have been speaking of to a very small figure among many other figures in the outer world.

The explanation of this lies in the fact that among the many experiences which constitute the totality of our one experience, among the many sensations which at any moment crowd upon us, there are a certain number which cluster together in a definite, recurrent, and seemingly unchangeable order. This distinguishes them from other complexes which are changing, and do not necessarily recur; many of them, though for a moment quite as clear and evident, simply passing away.

This cluster of sensations, which is always there, and accompanies us through life, is our physical self or body. We cannot get rid of it, and it is probable that a general sensation of it is always with us, forming a more or less prominent feature in the flow of our thoughts and feelings.

Though the different sensations which in their ensemble constitute it are the same as those we perceive apart from it, and which we call things, this unique cluster or complex is always more or less surrounded by, or mixed up with, indefinite but very real feelings of pleasure, enjoyment, and comfort, or, on the other hand, of discomfort, suffering, and pain.

Now we observe within our own inner experience other clusters of sensations similar to what we call our body; and we infer that these other clusters are connected in a similar way with what we term

an inner life, that is, with a similar flow of thought, and a similar firmament of experience. But it is important to realise that we know nothing directly of this inner life of others, and are only very moderately successful in guessing at it and figuring it to ourselves so that it may enter into the circumference of our own total experience.

The fact that the whole of our immediate experience is most intimately connected with one portion of it, which we term our body, gives to the conception of self a compactness and vividness which it would otherwise lack. We see ourselves as it were from two sides, first, as the totality of our present and remembered experience; and secondly, as a definite assemblage of vivid sensations, which occupy only a very small portion of the whole field embraced in the first view.

Our Self is thus compounded of two selves, an inner and an outer self. The first is the firmament of our thought; the second is our body. In contrast to the latter we call the former our Mind, and both together our Personality.

Looking at it from this point of view, we arrive at the first and most important characteristic of Personality, which we involuntarily attribute also to other selves or persons who surround us. The first or inner view of our person, the totality of our whole experience, present and past, contains the second aspect as a small but permanent complex of sensations; a part, a feature in the whole, in fact a thought, taking this word in its widest sense. Yet the other aspect, our outer self or body, appears to us as containing in some indefinable manner the whole of our inner world

or existence as a thing: popularly speaking we look upon our body and the whole of the outer world of which it forms an infinitesimal portion, as containing in a small corner the whole of our inner life, that is, our mind; and *vice versa*, our mind contains everything, including this outer self, as a thought. Personality thus consists of two aspects, each of which contains the other.

II.

The foregoing train of reasoning may suffice to persuade one or another of my readers, who has perhaps with difficulty and reluctantly convinced himself that everything we know, all existence for us, is contained in the firmament of our own changing thought; and who, having gained this speculative and artificial standpoint, desires to find his way back into the common-sense view of things, such as practical life forces upon us.

The rationale of this complicated argument is that we form our view of other persons and *a fortiori* of other things, by analogy with ourselves. And this is something like the step which Berkeley took to escape solipsism, that is to escape from the first position which I have induced my readers to take up. *Solipsism* is a term compounded of two words: *solus*, which means alone, and *ipse*, self, and it describes the self as the only existence, in the same way as we have done in our first description. It is, however, quite evident that man and mankind have not arrived

by such a process at the knowledge either of the outer world or their own self. For the argument has only been carried through by an intricate and abstract process of introspective search. Also in the history of thought, it was not put forward distinctly and concisely before Descartes; and the implications contained in his aphorism were neither fully realised by himself, nor have they, under the hands of a succession of prominent thinkers, been even yet completely stated and followed up.

The whole argumentation is accordingly an afterthought or retrospect, and the true process, the practical experience, by which human beings have arrived at knowledge of the world and of themselves must be quite different.

We have seen that the analytic and synthetic treatment of the human understanding by Hume required a corrective, through which not only the ideas or constituents of human thought, but also their order and arrangement, could be described.

This corrective we have termed the "synoptic aspect."

But both Berkeley and Hume were deficient in another direction, which was indeed indicated by Locke, but not followed up.

Modern thought has added and strongly urged this other way of looking at things. It showed itself first in the Natural Sciences, as did likewise the synoptic view. This latter view is essentially dependent upon the Arrangement of things in Space—be this the outer space around us, or the inner expanse of our sensations, feelings, or thoughts. But there is also, as William

James's term implies, an expanse or succession in Time, and the contemplation which makes use of this is what we now term the genetic view, or, in fact, the plain historical way of Locke.

The Genetic or historical view has, in the Natural Sciences, been adopted in two distinct ways. It was first applied to the origin and growth of individual things, both living and lifeless: notably in embryology and geology, the history of the individual human frame and the history of the Earth. But the investigation of the human body, and also that of animals and plants, led on to the question of the development of species, to the genealogy of living things. The earlier studies in genesis, those referring to individual beings, was termed Ontogenesis; the later form of genetic study was termed Phylogenesis.

Now this genetic study may also be carried on with the human mind as its object, and so it has been in recent times, under various aspects. The study of savage and half-civilised peoples has led to various theories regarding the growth of the forms of human speech, the customs and habits of many countries, the religious and moral ideas, as also the beginnings of methodical thought, and the rudiments of science. A second class of thinkers have studied the development of child-life, the dawn of mental and moral achievements in infants and children.

But in both cases we are met by a great difficulty. As stated above, we know directly and observe only the physical side, the external and bodily manifestations of the subject we are interested in: and this latter we infer or picture to ourselves only by analogy

with ourselves; each observer having only his own total inner experience to guide him.

And this latter experience is, to far the greatest extent, that of his adult mind; with very scanty reminiscences of the slow and gradual steps by which he reached this.

From this it follows that the results gained by these various methods are extremely uncertain and precarious.

No consistent attempt has ever been made to confine oneself to the purely introspective aspect, and to see how far one could get on this road alone.

III.

The task lying before us, as indicated in the last sentence, may be termed the exploration of the field of consciousness, of the stream of thought, or of the firmament of the soul—whichever term we may choose to describe the total expanse and changing aspect of our inner life: this is a life including also the whole of what we term the outer world, in the form of sensations, or ideas and memory pictures derived from them. But it in addition contains, probably as the predominant part of itself, the whole world of feelings, defined and undefined desires, longings, volitions, willings, and efforts, &c. And it is, as stated above, important to note that these different occupants of our field of consciousness alternate with each other, one chasing away the other, occupying, so to speak, the space of others which depart or linger in shadowy distance, forming a fringe or background to clearer objects which

lie immediately in front of our inner eye, commanding our attention and interest.

There seems in this respect to be no difference between what we term the clear and definite impressions and perceptions of some of our bodily senses and the quite indefinite feelings, physical or mental, which we are inclined to consider as purely personal. We may compare these with the clouds which in our physical firmament obscure the definite objects, such as sun, moon, and stars, either rendering them dim and shadowy or hiding them altogether.

But continuing the analogy still further, we may be inclined to look upon these different objects in our outer firmament as more or less real; deeming the sun, moon, and stars, owing to their greater vividness, distinctness, and periodic recurrence, to be more real than the fleeting mists and clouds which possess less definite contours, many varying shapes, and never come back again in the same way. This was indeed a view quite common even among civilised peoples before the age of science; but nobody nowadays would deny that a cloud or vapour has as much reality as the sun, the stars, or the earth.

The first axiom or rule which the introspective psychologist must lay down and follow in his studies is the recognition that everything within the field of consciousness, every object or feature in the changing firmament of thought, deserves the same epithet of an existent: the whole of this changing firmament being the only and all the reality we know of, the primordial existence, the great fund from which we draw all the special things which we deal with, either in the open

daylight of what we term the outer world, or the half illuminated regions of our private personal experience.

But, when once he leaves pure introspective psychology, the philosopher will have much more difficulty in convincing the popular mind that these two regions deserve, in the same sense, the same epithet of reality. To convince my readers that the difference which common-sense asserts, and which a philosopher cannot deny, is not the primary state of things in our slowly acquired experience, it will suffice to consider for a moment what can possibly be the state of mind of an infant when awakening to the sensations of its earliest moments of existence. It certainly has no idea of what we term reality, for as Locke tells us, and everybody accepts, ideas are not innate or inborn, but follow definite sensations; and the range of sensations of an infant must be very small, consisting probably of feelings of comfort or discomfort, pain or pleasure, desire or satisfaction. Definite perceptions can only gradually present themselves in this small field of consciousness as the higher senses of sight, hearing, and touch become developed; they will emerge out of the chaos of indefinite feelings something like our experiences in the first moments when we awake out of sleep, or when, as we lie awake in a dark room, a dawn of light slowly discloses a variety of external objects with their colours, figures, and outlines. If this account of the dawn of consciousness is correct, we may ask the question what impressions, or clusters of impressions, are probably the first which distinctly appear and stand out within this general chaos of feelings and sensations.

Now it has occurred to some thinkers, and notably in more recent times,[1] that the first sensations and impressions which stand out clearly in the flow of an infant's consciousness, the stars as it were in its firmament, must be the sensations connected with its first movements and experiences in life. All these are connected with the person who nurses the child. The feeling of warmth and comfort, of hunger and satisfaction, the pressure of a caress, the glance of a pair of eyes, the voice with its modulations; the check which the infant receives to its unconscious but restless movements; the definite outline of a face and figure; are the first experiences in the earliest days of our life, and they, changing and recurrent, cluster together and present the image of a person. And as this cluster of sensations and impressions suddenly, after a lengthy dawn, starts into full daylight, forming a compact whole —in the same way as the two blurred pictures in a stereoscope start all at once into one solid image,—so also the moment when the infant sees clearly for the first time its mother or nurse, constitutes for it a revelation—the first revelation of what we all call the outer world; the not-self within the all-comprehending circumference of what the infant learns to call itself. And be it also noted that all the lifeless things which are dangled about in order to attract and awaken an infant's attention and interest, are connected with the same person or persons that form its earliest outer experience.

Now the appearance of a definite image within the firmament of the infant's mind is not gained by any

[1] Cf. 'Religion and Science: A Philosophical Essay.' Part I., sect. vii.

conscious process of analysis or synthesis, but is a synoptic object of sight. It comes, as it were, by itself, as the image in relief in a stereoscope does, without any conscious effort of our own. In both cases the whole is seen clearly before its parts, which attain clearness and receive attention only after they are recognised as elements or parts of the whole.

If we adopt this view, we must maintain that the sight of a person or persons is the first clear knowledge of what we term an outer existence, of an existence other than, but still contained within the totality of our experience. If this is so, *Personality* is the first instance, and becomes for us the first category of reality; lifeless things becoming only gradually detached from Personality, and found to possess a different sort of existence.

IV.

A full-blown Personality seems thus to be the first definite experience within the horizon of an infant's flow of feelings, and of mixed and confused sensations.

This gains vividness through alternating disappearance and reappearance. Some lifeless things may gradually gain similar importance, but the spontaneous mobility of the personal appearance will gradually mark it off from the more rigid and unchanging environment of lifeless things. We know, however, that both with children and primitive people, it takes a long time before a clear distinction is realised between the living and freely-moving personality and lifeless

objects. What we may term the attribute of animation clings for a long time to many inanimate things.

But now we must register a further important experience in the child's mind; and this experience is the gradual perception of its own body.

Not until the child recognises the continual presence of this cluster of sensations, their proximity, and the fact that they cannot be got rid of, is it likely that a fairly definite contrast between the not-self and the self, the object and the subject, will arise and become the dominant feature in all succeeding experience. It is well known that children talk of themselves as definite outer beings before they learn to use the word I. The principal point which we should bear in mind is that what we term the not-self in the form of Personality must be an earlier experience than that of our own Self, although it will, to begin with, in the history of the child's mind, not appear as a not-self but only as a definite mark and vivid cluster of sensations, embedded in and surrounded by a confused halo or penumbra of indefinite feelings.

The moment when the child sees itself in its outer figure as standing among other similar figures, be they adults or other children, marks an epoch in its mental development. For not only does this bring perfect clearness between the "me" and the "not me," the self and other selves and things, but it throws into the background that less defined flow of experiences, feelings, and sensations, which really form, in their totality, the primordial content of the child's mind. From that moment, and probably increasingly so in the course of our life, we, in thinking of ourselves, unavoidably lay

the greater stress upon our physical outer appearance, which distinguishes us from the great variety of other beings; all moving about, as it were, on the same plane. We now realise that we are one among many, a very small unit in a multitude; and we have some difficulty in remembering that all these beings and things, moving about on the same plane, which we call the external world, exist and are known to us only through impressions of our senses, that is, as features in the stream of thought. Forgetting this, we enter and live in a new world, seemingly—though not really—different from and opposed to the inner world of thought; and so great does this difference appear that we henceforward involuntarily look upon this new world of persons and things as endowed with more reality than the primordial self with all its experiences, from which this new world has become detached.

In fact, we may assert that only at this stage does the idea of reality, the attribute of being real, enter into the stream of thought, and this attribute has an opposite—namely, the unreal. It has a different meaning from mere existence; for unreal things, such as illusions, dreams, imaginations, memory pictures, &c., exist, but we do not call them real, their existence being limited but included in the stream of our thoughts: they have a place in the firmament of the soul, in the field of consciousness. This latter or primordial form of existence has, as already stated above, no opposite. As it embraces all thoughts it can only disappear with thought itself, that is, with consciousness. But on the other side, what we call real has its opposite in the unreal.

From this point of view the vexed question of the reality of sensations presents no difficulty. We have no conception or idea of reality before we have that experience—that is, those perceptions from which we, by a process of abstraction, form the idea of reality; and these perceptions are, according to our view, what we term external things and persons, including our own outer existence. There is therefore no meaning in the question whether the content or aggregate of these perceptions is real or not, for they are just what gives us the idea of reality. And this applies to the secondary as well as the primary qualities of Locke.

But it is just as meaningless to ask for something additional, some hidden kernel of reality, which holds these qualities together, and is, as it were, the bearer of them. For the same argument obtains here which we used in dealing with the whole of our inner experience, which is simply the totality of our conscious flow of thought or firmament of inner sight.

To sum up, neither in the shape of external matter, nor of a substantial mind, has the idea of substance any meaning or justification.

And yet the question returns, why are we always searching for these illegitimate objects as something peculiar, why are we unable to get rid of such things as matter and mind, the thing in itself, or the unknowable? To the answer to this question we must now direct our attention.

CHAPTER V.

SUBJECT AND OBJECT.

I.

We must now proceed to describe, as far as possible, the new conceptions or ideas which enter the mind when dominated by the contrast between subject and object. This contrast emerges as a clear conception at the moment when a certain number of vivid sensations detach themselves from the running stream of thought, or to use our other simile, when the constellations on the firmament of consciousness stand out, disappear, and return in defined order. We then become accustomed to think of these as something having independent existence, though they exist for us only as sensations among many other sensations, either with the vividness of present existence, or as the less vivid reproductions of memory. But this vividness and definiteness of an independent existence could never arise in the solitary mind of an individual. It is more than any other mental feature the result of what Ward terms "inter-subjective communication." For we learn by the very process through which external things are presented to us, that they stand in the same relation to other persons as they do to our own body. It is only through other persons that we are first made aware of

them, that they are connected with definite sounds, in the form of words and names, which latter we learn to use in the same way as they are used by others.

Imperceptibly and unconsciously we come to look upon them as a common possession, which we share with our fellow-men, and this gives them a special attribute of reality which we term "externality," to distinguish it from our own personal thoughts, which we term "internal."

It is also well to note that unless we are somehow assured that other persons see, hear, and feel the same things as we do—that is, have or had the same sensations at the same moment—we at once and involuntarily remove such sensations from the field of outer things—relegating them to the internal or subjective series of experiences.

Some examples may illustrate this:

As stated above,[1] the *mouches volantes* fall back into the region of purely subjective experience when we find that we alone have had the sensation. And on the other hand, the idea of a new planet wanders from the region of thought or from the chart of the astronomer into real Space when actually seen through the telescope. The celebrated announcement of Leverrier and Adams that they had discovered by calculation the existence of a new planet would not have satisfied the popular mind if Gallé at Berlin had not seen the star, and if others had not confirmed this. The discovery, if not thus supported, would have fallen back into the doubtful position of an individual idea, or possibly an error.

No scientific discovery is accepted as such except it

[1] Page 61.

be verified by many independent observers. If thus confirmed, it wanders, as it were, out of the inner world of the discoverer into the outer world of facts—that is, it becomes a possession of other minds.

The most important instance of externalising a purely personal experience is that we, in the course of our practical life, more and more connect—or even identify—our inner self, that is, the totality of our present and remembered experience, with our physical body, with that cluster of sensations which is visible to our fellow-men.

Though the cluster of sensations which in our field of consciousness constitutes our outer self, is only a very small portion of our stream of thought, it nevertheless, being always there and recurring in familiar sensations, becomes, as it were, the unifying centre of our whole existence; and this view is strengthened by the fact that we, treating other persons on a parity with ourselves, feel convinced that their physical existence—which is the only thing we know of them—is similarly the concentrated expression of their inner selves. This conviction, without which no communication with others would be possible, leads us to look for some definite point or points among their physical appearances which shall reveal to us the existence of that inner world which we conceive to be similar to our own.

That this search is fruitless may be seen by the following consideration.

II.

If we adopt the view explained in the foregoing and discard the notion of substance, both so far as our own inner self is concerned, and also when we think of outer things, it is clear that the problem of the relation of mind and body cannot arise as it is ordinarily stated. For all we know of the former is that it is constituted as a stream of thought, and all we know of the latter is that it forms a definite recurrent cluster of sensations embedded in that stream of thought.

From this point of view the relation of mind and body is accordingly that of a changing whole or a totality to a small but recurrent feature within it, forming a part of it. The first is accordingly the larger, and the second the smaller aggregate. As seen, felt, and known by us, the body is embedded and surrounded by the whole inner world of thought, of which it forms a very small portion.

It is neither more independent than other sensations which may have the same vividness, nor is it connected with the totality of our stream of thought, or our firmament of consciousness, in any other way than, for instance, the centre of a rounded plane is connected with the other part. It is simply a centre of reference for our thoughts, which through its ever recurrent presence and seeming stability holds them together.

To say that the body contains the mind would be just as correct or incorrect as to say that the centre holds together the circle. It would be more correct to say that our consciousness, that is, our mind, contains

its body as a special image or centre of reference. Nor is it possible to say anything more about this special connection of the two than we are able to say about the connection of a part with the whole.

And yet we must answer the question, How does it come about that we are continually tempted, popularly, to look upon the flow of thought, the whole world of inner sensations, as contained within the body or a special part of it?

The explanation of this will be found in the fact that wherever any special object, that is, any definite sensation or cluster of sensations, belongs to that region of thought which possesses those attributes of clearness and definition which we term spatial, we are involuntarily driven to attach to it a higher degree of reality than to other experiences which are not thus connected. Thus, our body impresses us as being more real than the general flow of our thoughts and feelings.

And this impression is very much strengthened by the fact that, comparing ourselves with other persons, we can only deal with appearances in space.

Of other persons, we observe and know clearly only what their bodies show: although we are firmly convinced that these bodies represent or reveal an inner life, a flow of thought, similar to our own, we know of this only through inference from and analogy with our own inner experience.

And it is well known how extremely precarious and uncertain this process of judging by inference and analogy is, how it gives us only a very general view of the mind of others, and breaks down absolutely as soon as we attempt any minute description or analysis.

Being thus almost entirely limited in our thought and knowledge of others to that spatial minimum which their true personality exhibits, and nevertheless treating them as equal to ourselves, we become accustomed to look upon ourselves likewise as something outside of our inner firmament of thought. In fact, we learn to regard ourselves, as it were, with the eye and from the situation of other persons.

Now, those sensations or aggregates of sensations which have the property of presenting themselves as situated in space, permitting us to see them together although they are separate from each other, form the distinctive elements of the outer world. And as we can in many instances point to them, so that they become features also in the minds of other persons, and as in fact it is only through other persons pointing them out to us that we originally became aware of them, this world of sensations, these constellations in our inner firmament stand out, forming a special class by themselves detached from the background of the whole region of consciousness in which they are embedded.

They possess more permanency than other features within that firmament, recur again and again with similar distinctness and similar features; they become familiar to us, are easily remembered, and can be pictured in thought or imagined if described to us by others. In fact it is mostly through what other persons tell us that this world of spatial images is constructed. Without the help of other persons, what we know of this outer world would be a very small and incomplete thing, containing many features of which we could not be certain whether they are objective or subjective.

It is entirely through intersubjective communication that the outer firmament within the more comprehensive inner firmament gradually rises into prominence, occupying the first place in our attention and interest, and forming also the main, if not the only, subject of our communication with others. Through this intercourse with other persons the plane of the outer world becomes for us gradually filled up and completely covered with sensations which are, to a large extent, never experienced as such, but only imagined by us individually.

III.

In the way just described, the complex of sensations which appear located in space gradually joins together and forms a new totality. This totality, which includes not only things fixed and defined in a distinct order, but also other persons, and our own bodies, and with them, as it seems to us, all the inner world of thought possessed by them, appears, in the practical and popular view of the world and life, to contain everything—we call it the Universe.

Before our physical or our inner eye, it appears as a great surface, which we learn has also the dimension of depth. The more we look at it, either directly with our physical eye, or inwardly in the memory pictures which we carry about with us, the more it seems to be continuous, with no gaps or empty spaces. Experience accumulated through ages, and adopted by us, has taught us that wherever an apparent empty space exists

it is nevertheless, on closer examination, found to be filled with things of a similar order to those which we clearly see or experience through our senses. And a remarkable property of this spatial expanse is revealed to us in the fact that, through artificial methods of enlargement or reduction, we can reach in imagination what otherwise would be inaccessible to us because of its immensity or minuteness.

In this way the astronomer traces on paper in a small compass the whole of the physical firmament, and the naturalist, by similar means, the minutest invisible constituent elements of visible things. The telescope and the microscope come here to our aid, and not only are we able through drawings and models to picture to ourselves and study the vast regions of the starry heavens, but likewise the infinitesimal structures of living and lifeless things.

Yet, in spite of all the ingenious methods and devices which permit us to see and touch what is invisible or out of our reach, this supposed totality of things, this all-comprising universe, finds no place for that much larger expanse of the inner firmament of thought and feelings which contains the whole of the outer Universe in the form of passing but ever-recurrent features.

Faced with this dilemma of not being able to find in the outer world or universe any room, or even any location, for the inner world, we fancy that behind this outer universe there lies hidden a spiritual, as distinguished from a physical entity, a reality of quite a different order: we divine this in the outer world only through the irregular movements of living things which cannot be brought into coherence with the regular,

uniform, and mechanical order of by far the larger portion of external phenomena.

And here a further difficulty arises.

This inner world manifests itself externally to us only in an extremely small portion of the whole universe. And on the other hand, the instances of its manifestations are so innumerable, though so minute in their aggregate, that we are forced to assume that this inner spiritual or subjective world exists many times over in many examples.

Certainly in as many examples as we know of personal beings, and possibly also in those other living things which exhibit some attributes of personality.

The circumstance that we are popularly convinced that other persons contain within, or connected with their physical frame, an inner world similar to our own, leads to another dilemma.

Through intercommunication with other persons we learn that they see and feel and hear the same outer things as we do. As these outer things which we consider to be outside of our own bodily self, cannot in reality be within the body of other persons any more than they are within our own, we come inevitably to the conclusion that these things exist in duplicates. Placing, for instance, a definite object in front of another person, it is evident to us that the two things, the object and the person who sees it, are quite separate. Nevertheless, the person is able to describe the body to us approximately in the same way as we see it ourselves.

We therefore inevitably consider that the person or subject has within itself, as it were, a mirror which

contains the reflection of the body. In this way, we reverse the actual order of things and suppose that the object is the first, and the reflected image the second fact or event, and transferring this relation to our self, we assume that the external object and the whole external world must be there before we can see or experience it; whereas, in the order of events, undoubtedly the whole outer world was at one time in our lives merely a flow of sensations, which we have, through processes partly described above, gradually learnt to project outside: this means not only to see and feel, but to see and feel definite things.

IV.

In our description so far we have made much use of the term "inter-subjective" communication with other persons, and we have seen that without this the development of our field of consciousness, the gradual clearance of the firmament of our soul, could never have taken place, for this begins, as we have seen, with the earliest nursing and fondling of the infant by its mother or nurse.

It will now be necessary to look somewhat more closely at this intercourse between one person and another.

For it is only through this means that the original, purely personal stream of thought has been broken up into many features, that our attention has been concentrated on some of these features more than on others, that we have learnt the distinction of object and subject,

of self and not-self; that we have formed unconsciously the conception of reality and appearance, of being and nothingness, of present and remembered sensations, and that whole array of abstract notions with which we operate in practical life.

The question arises how this intercourse is possible. As has been pointed out by the eminent French psychologist, Gabriel Tarde, the beginning of this active intercourse on our part, that is, on the part of the infant, seems to reduce itself to imitation. This imitation is most effectively carried on by sounds. These sounds or words connected with definite sensations of sight or touch, or both, become associated in the infant's mind with what it learns to look upon as outer things. They form the beginning of speech and language.

Whether it is possible to think without words is a question which has been frequently discussed, variously answered, and never satisfactorily decided. The study of the deaf, the dumb, and the blind has been resorted to in order to throw some light on the subject. However this may be, there is no doubt that the most of us do not gain full possession of our mental ability without the aid of the speech of others as well as of our own.

It is through what others tell us that the greater part of our knowledge of things external is acquired, and as stated above, it is very unlikely that we should ever gain a clear view of the world and our outer selves without observing and communicating with other persons—that is, with beings who present the appearance of sameness or similarity—in fact, of parity with our own self.

The popular view, adopted also by Science, is that the intercourse between persons is limited to their physical or external existence; that we see, hear, touch and feel each other merely through our bodily selves. We have, however, shown in the foregoing that this limitation of personality to our bodily selves is quite gratuitous, and so far as each of us is individually concerned, quite incorrect. Our body, that is, the complex of sensations constituted within the firmament of our inner experience, forms only a very small part of the total expanse of our changing thought within the stream of consciousness. Assuming, as we must do, that other persons are possessed of a similar expanse of inner experience, it is quite gratuitous to suppose that their existence or reality is limited to the small speck they appear to be on the outer firmament; or that we have any right to place their inner self somewhere inside or behind their bodies.

From our point of view the body is only, and at best, a point or region of reference, where, in some way which we cannot picture to ourselves, the two worlds meet: a point of transition through which the inner self communicates with the outer, and *vice versa*. All analogies taken either from the inner firmament to explain the outer, or from the outer world to explain the inner, are palpably totally useless.

The popular and conventional supposition that all thought and inner life is located somewhere within the physical body, or in some definite portions of it, must be given up as quite gratuitous.

Even so far as the outer world alone with its physical manifestations is concerned, modern inventions

have shown us that in speaking to and with another person, addressing to him and receiving from him intellectual information, it might be quite unnecessary that this person himself should do more than communicate without our knowledge, at the very moment of our intercourse with him, with a distant thinking person; himself acting only as a point of transference of thought and intelligence which he may not understand.

The fact that when observing other persons the infant learns to imitate is a phenomenon quite unique. It cannot be analysed into any simpler elements, but must be taken as a fundamental property upon which intercourse with others is, to a very large extent, founded, and which in return promotes this intercourse. And even in after life we are all more or less prone to adopt, unconsciously, the manners and ways of those who surround us. And yet, even if we accept this fundamental fact as an essential property of personality, it goes only a little way in explaining the growth of our mind in the course of our earlier life. A still more peculiar phenomenon is the fact that, by repeating gestures, words, and sentences, there are created within our mind abstract notions similar to those possessed and used by other persons, and on this marvellous property depends the whole of our intelligent intercourse with others, and the whole of our behaviour throughout our whole life. We seem to possess, in common, certain general ideas, and to form them almost entirely, and unconsciously, through the influence of others.

The contemplation of this marvellous phenomenon,

the growth of our inner world through the influence of others with whom we stand seemingly merely in physical contact and communication, forces upon us almost necessarily the conviction that there is a direct intercourse between the inner worlds, or streams of thought, as there is between the portions of the outer world, that is, its physical bodies.

Such an intercourse seems to most of us unthinkable, just as it seemed unthinkable to Newton and Faraday that physical bodies should attract or repel each other at a distance, without an intervening medium of communication. But this truly intersubjective, or spiritual, communion becomes more plausible if we, as stated above, abandon as unlikely the idea that the minds of individual persons are located and confined within their bodily framework, and are limited to communications through it.

CHAPTER VI.

OF REALITY IN GENERAL.

I.

We must now proceed further in our exploration of the field of consciousness, and recall some distinctions which were made in an earlier chapter. Of these the most important is the differentiation within this field that is included in the total expanse of our experience, of those features or sensations which we term real, as distinguished from others which equally exist, but are relegated to the region of purely subjective happenings.

The latter have an equal share with the former in the property of existence; that is to say, in the stream of thought, or in the firmament of our soul, they form events just as much as the more definite impressions of our physical senses. They alternate, or exchange places with the others, compelling them to disappear, as they are on their part frequently driven away by the generally more vivid sensations connected with our physical self.

Of many of the latter, that is, of physical sensations, we only gradually learn that they are located in our bodies. It is very unlikely that the bodily sensations

of hunger and thirst, of cold and heat, of pain and discomfort, are in the early days, or even months of our life, located by us in definite portions of our body; they are probably quite indefinite in this respect, as many even violent sensations in after life cannot be precisely located. But this does not prevent them from being quite as intense, forming quite as real events or facts in our inner life as the impressions of the outer world.

A violent pain, which we are at a loss to locate, may absorb for a moment our entire attention, covering as it were the whole field of our consciousness and driving away every other feature within it.

But not only bodily pain or enjoyment may absorb us in this way, but even mental anguish may be so acute that we entirely forget our physical surroundings. A keen lover of nature and natural scenery may for a moment be entirely oblivious of surroundings which he otherwise passionately enjoys, when his mind is full of some distressing thought:—

> "In the wild woodlands, in the wild woodlands
> I hear not the song near by,
> For beyond the waving tree-tops
> The great world heaves a sigh."

In such moments the self or ego is as it were contracted into a single sensation, be this external or spiritual. For we can, in the same way, in listening to the complicated world of sound of an orchestra, or watching the scenes of a play, become entirely oblivious of everything else around or within us; and we are at such moments completely unconscious of ourselves and the larger world. Fortunately such states last only for a moment, and we are soon awakened again to

the reality of other things and the existence of our own self.

According to our view, the difference between reality and existence flashes upon the infant's mind when it recognises another person, and proceeds gradually to distinguish between such persons and its own bodily self. The differentiation between object and subject is then fastened upon the mind, never to be lost again.

It is not a process of analysis and synthesis, but a synoptic experience: and it is only by further search in the objective world—that is, in that portion of our personal experience which is both objective and subjective—that we learn the meaning and use of the word Reality.

All the attributes of reality are contained in this first experience, and by analysis of this we may gain some more precise definition of the sense of the term.

To begin with, as it arises through personal influence, we can never thoroughly divest Reality of Personality. And yet this is exactly what we have to do in the course of our early mental development, and still more, if we proceed in later life to take up the scientific aspect. Children and primitive men do not clearly distinguish between persons and things, as is shown in the play of children and in the animism prevalent among primitive races. The distinction between the two forms of reality seems to go hand in hand with the slowly growing observation of the uniformity and regularity of by far the greater portion of external phenomena, as compared with the irregularity and seeming waywardness of some beings which we slowly learn to call living. But the distinction between the

two is not clearly marked, and we are sometimes at a loss to decide where and at what moment the attitude of life appears or disappears. The clearer definition of this distinction is a problem which even Science is hardly yet able to solve.

As just stated, by far the larger portion of the objective or outer world appears, on investigation, to be devoid of life, and in consequence we are apt to neglect or entirely forget the living things among the overwhelming multitude of lifeless objects with which most of us are mainly occupied in the business of life.

In fact, being unable to give a clear definition of life itself, and seeing that most, if not all the attributes of living things, taken singly, are no other than those of lifeless things, a school of thought has arisen which is termed materialist, and which explains, or tries to explain away as merely apparent, the mysterious property of life. It is only in a special arrangement or order of the same elements that living things are distinguished from their lifeless surroundings.

The most searching analysis does not discover any difference in the constituent elements, nor in the modes of motion, and it is only when we try to put these elements together that we realise the impossibility of restoring that peculiar order or arrangement which living things originally presented to us. This peculiar property is termed organisation, and seems to be the *sine qua non* of life and *a fortiori* of personality.

II.

A very important character of all those sensations, impressions, or experiences which we call objective is this, that they present themselves to us in space. As spatial, they appear at the same moment both together and apart.

This enables us to distinguish them one from the other, and at the same time also to view them in conjunction. Out of this fundamental property of objective things, which cannot be further explained, there grows the abstract notion of individuality, if we take things singly; and of number and position, if we take them together. Without these spatial properties, definite thought would probably be quite impossible.

The term individuality has in modern parlance lost, to a great extent, the meaning indicated by its derivation; for an individual thing need not be indivisible, but is only for the moment considered to be a unique whole which might lose its specific character if divided. Yet it is true that what we term the higher classes of individuals possess to a large extent this character of indivisibility.

But the character that attaches to all things or beings is more exactly that of separateness. They can be either physically or mentally detached from their surroundings, and viewed and examined by themselves.

And here we may mention the principal distinction between definite objects—that is, clusters of sensations in our field of consciousness, which we remember, and the same objects if merely imagined. A remembered

object has always a definite location or environment, whereas the same thing, if imagined, presents itself as it were in the void. This may be proved by the fact that we can never be quite sure that we have seen and not only imagined an occurrence, unless we can locate it in time or space, or both, and in its position towards other things and ourselves.

It is, however, quite possible to receive such a detailed and lifelike description of various events or situations that we firmly believe that we have experienced them ourselves. And a great part of the interest of fiction depends upon the ability of the writer to create this illusion in the minds of his readers.

It has been mentioned above that in the course of our education, and in after life, we have to abstract from some of the peculiar characteristics of personality in dealing with practical things. And this is eminently the case in scientific observation and reasoning. A similar fate seems to attach to the characteristic of individuality. It was a marked step in advance when Natural Science learnt to consider things lifeless and living, not in their detachment from each other, but in that special "together" which they present in nature.

The property of detachment or separateness is made conspicuous to us not merely by different location, which leads to the notions of distance and arrangement; it would very likely never have become known to us were the separate objects not different also through other properties, that is, sensations and impressions. The two main sources of the variety which things present to us are differences of light and

colour, and of touch; the latter generates the notions of hardness, solidity, and volume, and further of temperature. Without this variety given through sight and touch, the outer world or firmament would probably never detach itself as a separate existence, just as we should probably never speak of the sky were it not filled with sun, moon, and stars, with cloud and other atmospheric objects. These differences which create the enormous variety of external aspects are nevertheless of such a nature that, in the scientific treatment of things, they are almost entirely obliterated.

They are what we term qualitative differences, as distinguished from those that are quantitative. The latter are capable of exact measurement, that is to say, they can be distinctly and accurately divided into parts, and compounded out of these parts, whereas the properties of light and colour, of hardness, solidity, temperature, cannot be easily subdivided and compounded again although they come under the category of more and less, or of degree.

Language distinguishes the properties of more and less in the two cases by the terms intensity and largeness or size.

As all scientific or exact reasoning depends upon definiteness and measurement, that science which deals with measurable distances in space is the oldest science; whereas the phenomena of colour and heat were only much later made the objects of exact sciences, and then only by the discovery that certain spatial, that is, measurable relations correspond to these phenomena. This is usually expressed by saying that Science reduces qualitative to quantitative differences, which can be

either directly observed or inferred by rigorous geometrical analysis and measurement. And here we may note that some of these measurable geometrical relations would probably never have been discovered, had it not been that in the actual world of observation they present themselves as specific qualities through our senses. This may be illustrated by the fact that only within very recent times have such phenomena as electro-magnetic waves been observed and studied, though they are quite as real as the tremors and molecular motions which are revealed to us through the special senses of sight and touch in the phenomena of colour and heat.

The scientific study of the external world is thus dependent on, and leads to the conception of sameness. And if we fully realise how far this sameness is carried in all those branches of research where geometrical methods are applied, it must become evident to us that without the qualitative differences revealed by sight and touch, we should probably never have arrived at the notion of individual or separate things at all.

III.

Applying the fundamental principle most clearly stated by Hume, that we have no ideas which are not ultimately derived from impressions; but also taking this principle in a wider sense than that in which Hume seems to have conceived it,—we may now proceed to a second class of ideas.

These ideas are derived not from distinct sensations or impressions, but from the manner in which these

single experiences appear joined together in the stream of thought or the firmament of our soul. Neglecting altogether the different appearance of different sensations, we may fix our attention only upon what we call their relations to each other. The principal relations are those presented in space and time. And in the same way as we form for ourselves by abstraction a whole world of the different properties or qualities of individual things, so we may also form, through abstraction, a whole world of relations, that is of the special ways in which individual things may be joined together or kept separate.

The fundamental relations upon which the whole science of relations is founded seem to be those of space. And it also appears that relations of time are only distinctly measurable through being reduced to distances in space. At least it is only in this way that the phenomena of motion can be subjected to the same accurate measurement as the different quantities which present themselves in space, such as distance, position, and number. In this way we have not only an exact science of space, that is Geometry, and of numbers, that is Arithmetic, but also an equally exact science of Motion, that is Kinetics. There is indeed one remarkable exception. A distinct world of sound exists which, through the sense of hearing alone, is built up without a direct connection with spatial relations. This is the world of musical sound—*die Tonwelt*—which, dealing with musical sounds of different pitch, seems to have an independent existence. It is capable of very intricate, exact, and delicate composition. It forms as it were a world and a science by itself, in which the properties of

melody and harmony form as definite a language and means of communication as visible signs and the words of ordinary speech are able to do.

It is true that this independent world of musical sound with its peculiar language is not serviceable for the same purposes as common speech is. But the elementary experiences or sensations which form its structure are just as real as those other sensations which are distributed in space. The latter we call things, and the former feelings and emotions.

Music forms a direct and independent means of communicating them to our fellow-creatures, as language forms the means of communication about its external occurrences. And in both cases the means of communication, that is, the respective languages, were not fully developed before they were represented by visual signs or symbols, that is, in the form of writing.

Now there is one attribute common to all those experiences which we desire and are able to communicate to others, be they properties of external things, or relations, or musical sounds. This attribute is what we may term a certain amount of permanency or stability. The primordial sensations or experiences which constitute them must repeat themselves in the stream of thought, leaving their traces behind them in the form of memory, and repeating themselves in the same or similar sensations.

The recognition of this important attribute obliges us to discard as inadequate the analogy of a stream, in which no individual wave, eddy, or whirl repeats itself, or is possessed of more than momentary existence.

Were the field of consciousness constituted in this way, we should be situated—as already stated—like travellers in a railway train, who gaze through a mist at the landscape with its objects galloping past them. We should not be able to retain in our memory definite images, nor to strengthen them by recurrent appearances.

I therefore prefer the analogy of the starry firmament, which combines with a certain amount of stability and permanency both the change and recurrence of its special features.

It is quite evident that a knowledge of things and their properties, or of musical sounds and their combinations, would be quite impossible without this permanency united with change.

And this attribute is equally important when we deal with relations as such, that is with order and arrangement.

IV.

But before proceeding further with our Analysis, we must have recourse to that process with which the great philosophers in antiquity started. They had found that their early forerunners had, through using the words of language indiscriminately, entangled themselves and their pupils in a maze of confusion.

In order to get out of this, they resorted, as I stated in the beginning of this Dissertation, to the dialectical process of fixing the meaning of the words and terms of language.

In our case the terms with which we have been latterly occupied require in a similar way to be subjected to a critical examination.

For our present purposes it is, for instance, of great importance to dwell at some length on what was said in chapter iii. as to the difference between Existence and Reality.

Common speech does not closely define the meaning of these terms. And this attempt to define clearly and separately terms which common speech uses indiscriminately and negligently may seem to some of my readers to be pedantic. They may maintain that such minute distinction, such hair-splitting, is unnecessary.

Against this we may hold that though not consciously carried out, such a process produces unconsciously in good writers to a large extent that indefinable excellence of style which we so often admire and are so rarely able to imitate.

In dealing, moreover, with mental images and ideas which are difficult to fix, and only communicable in words and terms of language, such a process of definition is indispensable.

For our object is not to write with elegance, but to induce our readers to form, in their own minds, those ideas and conceptions which we are talking about. It will, therefore, be necessary to recall the difference between such terms as Existence and Reality. The fact that we have two words which appear to a large extent synonymous, indicates that there is an underlying difference of meaning pointing to different ideas; and these different ideas must have resulted from different experiences, sensations, or perceptions.

To a great extent the definitions we adopt are conventional, but nevertheless they are indispensable.

To begin with, then, we must have a word which applies to everything we can think of, to every part, parcel, or complex within the circumference of the firmament of our consciousness. We have seen that the best word is probably Experience, and the property of Experience is Existence.

For we have learnt that everything that exists for us must have in some form or other a place in the changing flow of our mental experience.

To exist therefore is the largest conception, and that which attaches as it were to everything, and not only to external things, or purely internal sensations and thoughts, but also to imaginations, dreams, delusions, errors, and falsehoods. All these very various experiences have this one character, that they exist within the circumference of our thoughts and sensations. Nor can we correctly say that any of them do not exist, for at the very moment when we assert their non-existence we are thinking of the very thing the existence of which we are denying—*i.e.*, it has for a moment a location in our stream of thought.

But as we have learnt already, certain among our sensations or thoughts appear to us to have as it were more existence than others, and these we term Real as distinguished from others which we term Unreal.

We call the Sun and Moon, the persons and things around us Real, whereas we call dreams, fancies, and errors Unreal.

Thus, as stated above, the word Real has a narrower and more specific sense and meaning than the word

Existence, and this is shown by the fact that we may very well think of things that are Unreal, whereas we cannot possibly think of those that don't exist, because the latter, if we think of them, attain through this very act a form of existence—namely, they enter into the stream of our thoughts.

Now it is very difficult to draw the line exactly beyond which the attribute of Reality becomes inapplicable. On the one side, we have already learnt that the most real thing of which we have any conception or immediate experience is a person. Other living things are certainly real, and yet they seem to lack the fullest Reality which we can think of, and even among persons we make a distinction between greater and smaller personalities.

We are also forced to admit that even the greatest personality seems to lack the fuller or fullest personality which we can imagine, and this thought induces us to believe in the existence of higher personalities and finally in a supreme Personality. This is imaged by us in using the term reality *sensu superiori.* And similarly, we may use the term reality *sensu inferiori.* But these degrees of reality cannot be arranged as it were in a straight line. We cannot simply take away from the fuller reality certain properties and in this way gradually arrive at lower phases of reality. Thus, though the things which seem to have full reality are generally supposed to have individuality—that is, they have an existence apart from other things—we can detach them, regard them alone, abstracting them as it were from their surroundings; yet, on the other side, there are sensations which cannot be detached, and nevertheless

strike us as being very real indeed. Thus the term Reality, even in a high degree, is not limited to definite things, nor even to such experiences as have some permanence.

As already stated, no one would deny that an intense pain, even though lasting only a moment and not recurring, is a very real thing indeed; but its reality seems not to be merely different in degree, but of a different order, so that it cannot be ranged in the series of things which we ordinarily call real.

V.

We thus arrive at the conclusion that Reality not only has different degrees but is also of different classes or orders.

For our purposes it is not necessary to enter into detail, or to attempt any completeness in describing the scale of degree or the difference of order among real things.

It would be a very useful enterprise for students of philosophy to interrogate themselves as to which things or thoughts they would call real, and as to the different kinds of reality which they can think of. It is not likely that a general agreement on these matters could be attained, but investigation would reveal many individual differences, and in this way constitute a fruitful method in individual psychology.

Notably purely subjective feelings, emotions, or thoughts may be considered by some psychologists as unreal if compared with physical facts and events. Thus one school of psychology goes the length of considering

all mental life as a mere epiphenomenon—that is, as something which merely accompanies the physical and physiological structure and changes in the same way as a shadow may accompany actual things, though it would not be considered equally real.

Further, such things as truth, beauty, and holiness are regarded by some thinkers as simply Ideals, creations of human imagination, whereas others consider them to be by far the highest reality which exists.

And at different times and under different circumstances during our lifetime, we may attach very different importance to the same things, some losing and others gaining in reality as we advance in years.

VI.

The distinctions which we have drawn in the last paragraph have been arrived at by considering the words of language and their meanings. It is in the process of learning to speak that we originally form, unconsciously, the conception or the image in our mind of definite things. As this process of learning to speak is entirely dependent on our intercourse with others and on a process of imitation, we recognise in it the second great indebtedness to other persons. The first great indebtedness in the early stages of our existence was our dependence on and our gradual recognition of a definite something which we call a person. The impress of this first overwhelming experience accompanies us through life, and forms as it were the highest category of thought which we possess.

The second great indebtedness, the acquiring of speech, is not in general limited in the same way to the intercourse with one or two persons, but forms a link between ourselves and numerous not-selves, and is the most powerful means of communication, opening out to us a larger view of the world and our surroundings.

In a similar way this second great experience, this further development of our mental life, leaves an indelible impress on our thoughts and governs them throughout our life.

We may condense the main effect of this second revelation on our mental development by saying that it introduces us to a process of selection. Through it we are forced to exercise attention, to fix our inner eye upon definite sensations which can be isolated, abstracted out of the confused flow of our inner experience.

In the later stages of our mental development this process of selection and definition, originally acquired through language, is carried much further, and when it proceeds by conscious methods, and not unconsciously by simple imitation of others, we enter upon the scientific stage of thought, and we term the process Analysis. On review, we may thus call the two processes in our early experience the two great revelations through which our mental life has been awakened. The recognition of a person has revealed to us Reality, and the acquisition of language has taught us to make distinctions within this reality. The earlier revelation opens to us the Synoptic view of something that is an independent whole within the circumference of our

changing firmament of thought,—the later revelation teaches us to distinguish and separate; it opens to us the Analytic or distinguishing view. All our thoughts in our further life consist in an alternation between one of these processes and the other; the return from the Analytic to the Synoptic view being partially effected through what we term the synthetic process of thought.

But we never succeed, by synthesis of the elements and fragments which analysis has detached, in restoring the original totality or the Together which the synoptic view revealed to us.

Before dealing with this subject more fully, and especially before sketching in outline the different classes of Reality which emerge unconsciously or consciously out of the all-embracing field of our personal experience, it will, however, be advisable to dwell more in detail on the important part which other persons play in our early mental development.

Psychologists so far seem to have dwelt almost without exception on the mental equipment and activity of the adult human being, and here usually only with phenomena and events which could be accepted as common to all fully developed minds. In doing so, they disregard the personal history of the individual, and in consequence the genesis of order within the original chaos which must have been the condition of the infant mind. In addition to this, the habit of unquestionably taking the adult mind as the object of their study, they have forgotten or obscured the fact that a complete adult individual mind has, in the course of its personal history, only slowly emerged

from a state of dependence on other minds with which it formed, as it were, a connected existence.

It is one of the great merits of James Ward's Psychology that it has emphasised the fact and importance of intersubjective communion.

To this subject we must now give special attention.

VII.

The fact that we share with others certain of our personal experiences may be held to furnish us with the first and most important criterion of Reality. Through this circumstance, a personal experience—be it a perception or any other form of sensation—acquires as it were a double existence; the purely personal becomes twofold, and this we term objective and subjective.

This may be illustrated in many ways. Not only does a seemingly objective experience like the *mouches volantes* mentioned above lapse into a purely subjective sensation when we find out that it only affected our own person, but on the other side what appear to be purely personal experiences may attain to more or less distinct objective reality if we find that other persons share them with us.

It is in this way that such sensations as the beautiful, the good, and the spiritual, which seem originally purely personal, acquire more or less of objective reality as we find that others share them with us.

This opens out a very large subject, which we cannot deal with in this connection. But the in-

stances are numberless, especially in our emotional life, where we experience how certain interests start from apparently small or passing beginnings, and through intercourse with others grow in importance, and in the end stand forth as definite objects of our contemplation or desire. And on the other side, interests and things which, at one time of our life, commanded our full attention and governed our thoughts and actions, retire into the background through want of encouragement by others, and ultimately sink into insignificance and unreality. It is one of the principal characteristics of great works of fiction or of poetry that they deal with these rising and decaying mental interests in the characters which they place before us in the story or the drama. Those great psychological analyses which we find in such abundance in the French novelists, and in philosophical poets like Shakespeare, Goethe, and Wordsworth, constitute a chapter in the philosophy of Mind which few, if any, expert psychologists have attempted to write.

And here I will give only two instances: the slumbering or wellnigh extinguished sparks of religious life have not infrequently been fanned into a bright flame through the casual entry into some place of worship, where either the ritual or the pictorial surroundings, or even only the assembly of silent worshippers, points to some far-off object which they symbolically represent or spiritually contemplate.

And this is the reason why religious worship in communion with others so often surpasses the efficacy of solitary devotion.

Again, we may note that persons who visit foreign

countries very rarely arrive at an understanding of the peculiar mental atmosphere which there surrounds them; it takes a long time and a distinct desire on their part if they are ever to feel themselves thoroughly at home, and share with the people they visit those deeper interests which form for them the background of their mental and spiritual life. Most foreigners, *e.g.*, who have been domiciled in this country, even for many years, taking an active part in the practical work and external life which surrounds them, remain strangers to the emotional and spiritual interests of the nation; thus, even if they do not live isolated from their surroundings, they return to their own country with a very imperfect understanding of the inner life of the people among whom they have passed the greater part of their lives.

What has here been said will suffice to impress upon the reader how various are the meanings of the word "Reality": how it comes that this word has no adequate and exhaustive definition, but is applied to very different sensations and experiences.

Whilst it is quite possible to give a strict definition of Existence in the sense in which we are using the term, it is not possible to give an equally clear definition of what we term Reality.

To exist belongs to everything which enters as a feature into the stream of our thoughts—taking the word in the widest sense; and *vice versa*, existence cannot be predicated of anything that does not enter into this stream, or that does not form a feature on the firmament and within the horizon of our consciousness.

For a thing to be real—*i.e.*, to acquire a twofold existence, not only within our consciousness, but also apparently outside of it—very different and varying conditions must exist; and the question whether any sensation or thought has reality is, as we shall presently see, difficult to answer.

It will also have become evident, from the foregoing remarks and illustrations, that those among our personal experiences which in our infancy we share most distinctly with others who surround us, acquire for all time the impress of reality in a much more forcible and lasting manner than all the subsequent experiences of our life. And this is one of the principal causes why that which we term the outer world will always be clothed in our estimation, in a certain sense, with a greater amount of reality than all the other realities we may encounter as we advance through childhood and adolescence to the full possession of our mental powers.

To mention only one circumstance: all these latter more hidden realities form an object of common possession with other persons only through indirect means of communication—through language or some other form of expression—whereas the things that we call outer are presented to us and forced upon our notice directly by those persons who surround us, and attain a hold and location in the stream of our thoughts long before those indirect methods of speech, image, and symbol are accessible to us.

VIII.

Though what we term the outer world is that form of Reality for the recognition of which we are most indebted to the co-operation of our fellow-men, it is by no means through this circumstance alone that it has gained in our estimation the foremost place, becoming the groundwork of all our later mental achievements. There is another important attribute which belongs to this form of reality more fully than to any other. This is the attribute of definition and distinctness.

The outer or physical world is presented to us as broken up into separate things, each of which, in larger or smaller degree, seems to have an independent existence,—so much so that we can contemplate them, or even handle them, by themselves, detaching them from their surroundings. The first consciousness of separation is, according to the view set out in this treatise, the recognition of a person or persons, and it takes a considerable time before inanimate or lifeless objects appear to us as differing from animated beings.

It is interesting to note that our language contains no word which adequately marks off the property of singleness, separateness, which physical things acquire in our estimation; the word by which this property is usually defined and expressed is individuality, but the etymology of the word indicates rather the property, that any definite thing must be regarded and can be understood only as an undivided complex, than that it is singled out and detached from its surroundings.

It may be noted in passing that the German translation of the Latin term *Individuum* is "Einzelwesen," denoting much more directly the property we have in view. This property, that some of our physical sensations may be regarded singly and detached, or in connection and together with others, which, as it were, surround them, constitutes a peculiar scheme or order of arrangement in what we term space.

As much as to this unique property of spatial existence, we are indebted to the separation and connection of sensations of all kinds in Time. These two attributes of Space and Time, of which the former applies only to some of the Sensations which we learn to be connected with our bodies, whilst the other refers to all sensations or experiences alike, are primordial, and cannot be further analysed. All definitions which have been attempted, and still more, the so-called "transcendental deductions," are impossible; just as impossible as a definition or deduction of colour would be to a person devoid of sight.

We can, of course, investigate minutely the properties of Space, just as we can investigate those of colour and sound, but we cannot get as it were behind the spatial properties of things; whilst on the other side we are always tempted to express other relations of things, and even those of time, in spatial terms. Thus we speak of distance in time, &c., &c.

Whether the special properties which Space and Time introduce into our experience are independent the one of the other, is a question which we need not discuss here, though it is extremely important. It is, for instance, highly improbable that without Memory

which is the sense of Time, we could form distinct spatial notions.

It seems, however, quite clear that the progress of Thought in the narrowest and most abstract form, with all its intricacies, started originally from relations in space. Pure mathematics, for instance, were preceded by geometry and this by mensuration, and though arithmetic is apparently independent of geometry, I do not believe that even numbers were originally invented and learnt without reference to location in Space.

Some persons, as has been shown by Sir Francis Galton, retain all through their life a definite figure in which the numbers appear to them, and it is likely that what he terms "visualising of abstract conceptions," is more common than generally supposed. It would be an interesting research that would show us the enormous number of words and terms which in the vocabulary of civilised nations can be traced to the relations and properties of Space. These must have been invented and transmitted through hundreds if not thousands of years, and the number of them is still on the increase. But so far as the individual mind of infants and children at the present time is concerned, there is no doubt that the different relations of Space are taught and learned by the combined senses of sight and touch, joined to the words of language with which we signify them.

It is impossible here to enter into detail. We need mention only the leading conceptions of number, size, figure, of distance, of position, order and arrangement, of regularity and irregularity, of the simple and the

complex, which are but a few of those familiar relations that we learn by regarding things in Space.

This process of developing or learning a vocabulary upon the ground of spatial and geometrical relations would, however, not be possible without the sense of Time, that is of Memory, for very few of the notions referred to could be formed without the help of Change, —that is, if applied to the Space of Motion.

Postponing for a moment this attribute of change which belongs to all external things, we may note a fourth property, which as it exists to a larger or smaller degree imparts to single or complex physical sensations the character of Reality. To begin with, it is clear that except physical sensations had in our earliest experience presented themselves in clusters, or coalesced into complexes which were more or less permanent, and disappeared and reappeared again in the same order, we could never have formed the conception of definite beings or things. Thus, next to definition and distinctness, an easily recognised and remembered order of sensations forms the condition of our knowledge of the outer world. This recognition of order remains with most persons incomplete and fragmentary, and must have been so in the earlier ages even of advanced Thought. But as exact or scientific thinking grew up, the fragments of order which surround us coalesced into larger complexes, and these we call Systems. Thus every science begins even at the present day with what is termed a systematic treatment of its subject, wherein the region of fact, or field of experience with which it deals, is placed before the learner in some kind of orderly arrangement. Gradually within the last few hundred

years, this process of systematisation has advanced so far that we now conceive of the physical Universe as One Whole in which everything that exists has a definite place, standing in closer or more distant relation to everything else. This property gives to such things the impress of greater reality, and stigmatises all those other sensations and perceptions which cannot be located in this universal system, as unreal or possessed of a smaller degree of reality.

IX.

In the foregoing we have learned some of the characteristics of those things to which we attach the attribute of Reality—*i.e.*, of a double Existence, popularly defined as being both inside and outside of our Mind. In using the words Things and Mind, it must be noted that in this treatise we mean by Things simply sensations, or clusters of sensations, and by Mind simply the flow of thought, or the firmament of experiences peculiar to each one of us individually.

We have distinguished between Existence and Reality in this way. Existence belongs to everything that enters into our stream of thought; Reality belongs only to those among our experiences which have, as it were, a double existence, not only as features in our individual experience, but also as supposed to have an existence outside of this.

What we may term the fullest Reality, we, according to the foregoing, attribute only to other persons, and next to them to the things of the outer world. As the

latter comprise by far the greater number of those things which we call Real, including also persons, they form very early in our mental development a kind of standard of Reality which we carry about with us, which always obtrudes itself in our reflection, and is extremely difficult to get rid of. Looking at these outer things, we may gather up their characteristics under the following four properties :—

1. They must exist not only for each of us individually, but for other persons.
2. They must be definite, so that they can be singled out and detached in our observation or reflection—*i.e.*, they must have individuality.
3. They must stand in certain relations to each other, these relations being those of space.
4. They must present a certain order of arrangement, forming all together a system or Universe.

Although these four properties belong to the most common and unobtrusive Reality that we know of, they need not be always united as they are in what we term the outer world ; and the presence or absence of one or more of these properties in a class of sensations and experiences may characterise other orders of Reality, of which we may now give some examples.

X.

Quite another order of Reality is formed by the relations which exist between the separate things in the outer world. These relations can be stated independently, and form quite a different order of ideas from that which the things themselves constitute, which as we

say stand in these relations to each other. One of the simplest classes of relation is that of number. If we abstract from all the properties which single things in an aggregate possess, there still remain certain properties which they possess as an aggregate. These we call relations. The relations are threefold—Distance, Order, and Number. Of these three classes of Relations, Number remains if we disregard distance and position. We can always count things even if we cannot measure their distances from each other or assign to them a definite order. Numbers form in this way a Reality by themselves. They possess the first property mentioned above; they are the common possession of different persons. They have also the second property: each number is distinct and definite; and they have also the fourth property, they form a series or system.

To what extent they have the third property, that of being located in space, is uncertain. As already stated, some persons have a definite spatial arrangement in their mind in which numbers appear to them, and if such an arrangement or diagram of numbers is not very common, there is, nevertheless, no doubt that children learn the numbers by counting things which are in space. Another example of a Reality which is quite independent of that outer world which we know by sight and touch is the world of sound.

The reality of this world is accentuated through the fact that sound can be reduced or analysed into definite notes, which we term musical notes. These have the first property mentioned above, they are a common existence for many persons to a larger or smaller

degree; they have also the second property of being definite; we can speak of and produce individual notes; and they have the fourth property of forming a system with more than one dimension; they may be loud or soft, high or low in pitch, and they may have what is termed a different timbre (texture or colour). But musical notes have no location in space: they form a world for themselves.

But sounds are capable of forming yet another order or system, quite independent of their musical properties. This Reality we term rhythm or metre, and this forms a very important attribute in poetry which may be quite independent of the essentially musical properties of harmony and melody. The region, if we may so call it, in which rhythm, metre, musical notes, and their combinations exist, is that of Time, and it has nothing to do with Space, though to communicate to others Realities of this order we very largely make use of spatial symbols.

Another example may be given of an Order of Reality which stands quite by itself. This is no other than Space itself — which presents certain properties that are quite independent of the things that are located in or fill space. This order of Reality comprises geometrical figures with their metrical properties of distance and their purely geometrical properties of position. In this way we come to have two distinct forms of geometry—metrical Geometry and positional Geometry.

It is possible to enumerate other orders of Reality which form Systems with individual elements which enter into daily use and are the common property of

human beings. A complete list is difficult to draw up and need not engage us here.

It is more important to deal with certain orders of Reality which take us to a large extent out of the physical world with which the Realities just mentioned, namely, those of number, sound, position in space, and others, are intimately connected.

But before entering on this new inquiry which will lead us into an entirely different region of Reality, it is well to note one property which belongs to what we term external things, and which does not belong to any of the other orders of Reality which we have just referred to, such as musical notes, numbers, geometrical figures, &c. This is the property of external things which arises out of our sense of touch and feeling of resistance or pressure.

Through the sense of touch and muscular feeling we are led not only to a contemplative or passive reception of the varied experiences of Sensation, Perception, and Thought; but we are also affected in an entirely different way, the habitual restlessness which seems a characteristic connected with the earliest signs of life is checked or directed in a manner which reveals at the same moment both a subjective feeling and something that is felt.

This double experience which is peculiar to the sense of touch and resistance (and to a smaller degree to the senses of taste and smell), is quite absent in the higher senses of sight and hearing which, as it were, take us entirely out of ourselves, pushing into the background the distinct or shadowy surroundings which we call our Ego or Self, and this to such an extent that they

may make us entirely forget ourselves. The more vivid a sensation of sight or of hearing is, the less do we think of ourselves — that is, of the firmament or surroundings in which these sights and sounds are embedded. On the other hand, the more distinct the impressions of touch or of resistance are, the more we are aware of a double sensation which probably does more to produce the idea of self and not-self, of subject and object, than any other form of sensation. In touch and muscular resistance we are simultaneously made aware of something definite and of our selves.

It is quite true that the experiences connected with the bodily feelings of touch and resistance or pressure become of much less direct importance as the narrow field of an infant's consciousness grows wider, embracing more distant things. Most of the latter are inaccessible to this sense, but nevertheless it is through it that we probably gain the earliest and liveliest impressions of an outer world, and in it primarily of the person or persons with whom we come into close contact.

We may therefore state, in general, that the senses of sight and hearing take us, under normal conditions, most effectively out of ourselves towards the recognition of a not-self, and that the sense of touch and resistance brings us back again most effectively to a sense of our subjective self as a separate thing opposed to and among other things.

CHAPTER VII.

OF THE INNER WORLD.

I.

In dealing with the problem of Reality, and of the different orders and degrees of Reality, we must not forget that we are making a purely artificial or conventional selection among the enormous multitude and variety of experiences which make up the stream of thought or which fill the firmament of the soul. The impressions or clusters of impressions or thoughts which we thus select by habit, and for the sake of convenience, have no more actual existence than the multitude of other impressions which we, as it were, leave behind and to a large extent neglect. Nor is it possible to entirely detach the selected series or clusters of impressions and abstract thoughts from what we may call the matrix in which they present themselves to us primarily. This difficulty is usually expressed by saying that we cannot get rid of the subjective factor.

It is accordingly quite legitimate and even necessary not only to view the Realities with which we have been dealing in their nakedness, but also to view them in their clothing with subjective accompaniments, and to consider these accompaniments themselves.

We mentioned at the end of the last chapter that certain of our most definite sensations and experiences, those communicated to us by the senses of touch and resistance, cannot be detached from the personal background or the firmament of consciousness in the same way as the sensations of sight and hearing, and such other Realities as number and geometrical figures, &c., which seem to lie entirely out of ourselves.

Yet even these detached Realities hardly ever present themselves to us without the accompaniment of purely subjective experiences which we may term feelings in the wider sense of the word, comprising not only those bodily feelings which are connected with the sense of touch, but also the more general sensations which we term pleasure and pain, and further, desires, emotions, and volitions. As already stated, the supreme rule of scientific thought is to get rid of the subjective element. This is attainable only in a few of the sciences, and there only by a very small number of highly trained intellects. There we have quite the opposite of that aspect of things through which we are in our infancy and childhood introduced into the living world; and this aspect is also quite different from the common-sense view with which we regard and judge things in the course of our life. The infant and child are not brought face to face with definite things simply as such, but these are clothed with words such as pretty, beautiful or ugly, pleasant or unpleasant, good or bad, and with many gestures and actions expressive of such properties, so that the feelings of liking and disliking, of desire and aversion, are continually

aroused and mingled with the purely objective appearances which they accompany.

It would lead us too far, and is not necessary for our present purpose, to describe in detail the characteristic differences between those sensations which we externalise, attributing to them a double existence, and those others which remain to us always purely personal or subjective. But it is important to remind the reader that in the stream of thought or in the firmament of consciousness, they occupy just as real a place as do those sensations and thoughts which we believe also to exist elsewhere outside of our individual consciousness.

What interests us at present is the question, To what extent we are justified in attributing to them, or to some of them, Reality?

To begin with, we are struck by the fleeting and undefined character of what we may now call our inner sensations or feelings. We have difficulty in fixing them, and even if we succeed in doing so, they are nevertheless mostly of a changing nature; and if they recur, they rarely do so exactly the same. But this would not be a sufficient reason to deny them Reality in the sense in which we use the word; for many sensations which we term external are likewise fleeting, difficult to fix, and never recur exactly the same. Thus clouds are proverbially fleeting, changing, and never come back again in the same way; nevertheless we do not deny them the attribute of Reality, and we may even call them things. One of the principal differences between physical and emotional sensations is this: we may feel sure that the former exist also

for other persons, whereas the latter in general are confined in their existence to our own field of consciousness.

It is quite true that in our infancy and childhood, as just stated, we are led to believe that other persons share many of our emotional sensations, such as likings and joys, or the reverse, such as dislikings and sorrows; but on this point we can never feel so sure as we do that other persons feel, hear, or touch the same outer things as we do. Also, the process by which communion with other persons in matter of inner sensation is established, is far more complicated and obscure than the apparently simple means by which external sensations become a common property to us and others.

A second difference between the two classes of sensations is this, that physical sensations corresponding to real things exist in space and time, whereas inner sensations appear only in time and have no spatial location. Nevertheless we have seen that a certain class of physical sensations such as sound are externalised, although they have no location in space, but only fixation in time. And this is the reason why they are qualified to form the language of emotion; in relation to which it may be noted that it is not through their properties of definition and individuality that they approach so closely to the region of feelings and emotions, but in virtue of the indefinable properties of harmony and melody.

II.

One of the principal differences that exist between what we may call the outer and inner sensations is this; that the latter do not admit of any systematic arrangement. We cannot place them in any spatial or other order such as external things, numbers, musical notes and geometrical and logical conceptions admit of. They do not enter into any environment other than that of our stream of thought, and hence they do not acquire an independent existence, they seem to cling more closely to their original habitat in the depth of our innermost personal life and existence. We are also fully aware through intercourse with other persons, that these have an inner life different from our own though we may guess at it in a very general and tentative way. Through this quality of extreme diversity, these inner sensations of feeling, desire, and willing, form by far the most important characteristics of different persons, conferring upon every person an individuality of a much higher order than other things, beings, or even the members of an abstract series possess. Whilst we can fully describe and identify things in the outer world, or members in the series of numbers, tones, and figures, it is impossible to describe adequately and identify any living person. A single glance or interview does infinitely more than the description of the most skilful portrait painter, or the characterisation of a biographer or novelist.

We may indeed say that if our innermost sensations, feelings, and emotions did not remain concealed from the

view of our fellow-men, the most important characteristic of individuality would disappear, for the mystery which clings to the thoughts and feelings of others is to a large extent the source of the interest which we take in them.

Thus, although we may speak of individual things, singling them out among a crowd of similars, the deeper meaning of individuality belongs only to the more or less concealed side of personal life. For practical purposes of common life persons may be recognised by their external appearance, but in all more important respects, the Self of every person is identical with that portion of his flow of thought and stream of sensations which is hidden from the outer gaze and peculiar to himself.

Thus it comes about that in the course of our life we more and more identify our own Self with that portion of our stream of thought or of the firmament of our consciousness which is thrown into the background and little attended to during those years of our life when we are fully engaged in outer pursuits and engrossed in the business of the world. And yet it covers by far the larger portion of our field of consciousness; as also the illimitable background of the physical horizon is much more than all the suns, stars, and constellations which we can count. And to pursue the parable a little further, we may say that this illimitable and mysterious region forms, in both cases, the sustaining background in which the clearly visible things have their setting.

Nevertheless we do not feel satisfied to leave all this region of our inner life in that condition of mystery and

twilight which is its principal characteristic. Within this region there are a few luminous points or portions, just as the background of the heavens contains its "milky way" and its suggestive nebulæ.

To these suggestive indications within the mental horizon, we are inclined to attribute Reality of a special order. To establish this more firmly has been the principal work and supreme effort of all the great teachers of mankind—be they philosophers, lawgivers, artists, poets, or founders of religions. The names of these Realities are: Truth, Beauty, Goodness, and Holiness.

We must now direct our special attention to these supreme conceptions, these highest ideals of which the human mind is capable. They have, in different expressions, been termed Reality, Verity, or Value.

A twofold task lies before us. We may inquire into the meaning which is attached to these words. And we may further pursue the line of investigation which we have so far followed in this treatise. We may try to find out how the individual mind comes into possession of these ideals: how they are revealed to us in the course of our childhood and later mental development.

The latter problem is specifically our own; the former is answered in many ways in the dialectical and metaphysical philosophy of ancient and modern times.

We cannot deal with it adequately in this connection, and yet we cannot entirely dispense with the help which we may derive from a purely verbal consideration.

III.

The reason why the dialectical method is peculiarly applicable to such conceptions as Truth, Beauty, and Goodness is this, that we become familiar with these terms at a much later stage in our childish experience than we do with things and their relations. Our becoming acquainted and familiar with things in the outer world reaches back into the earliest period of our conscious life, so much so that the recollection of how we learnt of them is almost entirely absent; still more important is the circumstance that the names of things become known to us after the things themselves and their relations have been seen and handled by us. On the other side, abstract notions, and notably such as are designated by the words "True," "Beautiful," and "Good," only enter our minds by a mysterious process after the words themselves have been many times used and have become familiar to us. In the one case, the thing named precedes its name in our experience; in the other case the name or word precedes its meaning, which we have very frequently great difficulty in drafting. In fact most persons have very indefinite conceptions not only of these highest abstract terms, but also of many others which they nevertheless continually make use of in conversation or writing: thus, for instance, mind, matter, substance, development and evolution are used continually, but it would be very difficult to give definitions which would satisfy most of those who use them. The consequence of this is that many meanings attach to abstract terms, and the more in proportion

to their abstractness. Limiting ourselves, however, to the three terms mentioned which designate the highest Ideals which the human mind is capable of, we may dwell with profit on some of the characteristics which they exhibit.

We may note, *inter alia*, the following: Words like True, Beautiful, and Good are used not only as adjectives marking the properties of things; they are also used as nouns when we speak of the true, the beautiful, and the good. Thus, truth, beauty, and goodness are not only adjectives and attributes, but are conceived by us as Reality, having a supreme existence, and we attach to them through this quality a highest value.

Then, again, these terms refer distinctly to two very different kinds of property or quality: they may refer, as it were, without any emotional colouring merely to external objects and their relations. Thus we say a ruler or a line is not true, meaning by this that it is not straight. We say of a mathematical formula that it is beautiful, or of a solution of a problem that it is pretty, and we use the term "good" to designate all kinds of properties which have no moral significance; notably in this way goodness is frequently used instead of usefulness.

At all times there have been serious attempts to reduce the meaning of these terms to what we may call prosaic or matter-of-fact relations between things and persons. Thus in philosophy, Truth has not infrequently been limited to mere "consistency of thought"; beauty has been reduced to utility, as when Hume headed one of his essays with the words "Why

utility pleases"; and there is, of course, a widely known school of Ethics termed Utilitarianism. But all attempts to limit the meaning of the words to the lower level of clearly-defined relations have failed, and the human mind has always reverted to the conviction that these abstract terms point to something higher and deeper than the things and events of the outer world and common life. Hardly more successful has been the effort of metaphysicians to arrive at a general agreement by dialectical and critical methods of trial and error, of which we have a most brilliant example in Plato's 'Dialogues,' and in modern times, in Lotze's 'Metaphysics' and Bradley's 'Appearance and Reality.' It may then be of use to try the method followed by Hume with regard to such abstract terms as "Substance" and "Causality," and by us with regard to the terms Personality and Reality. This is equivalent to asking the question: What special experiences within the stream of our thoughts lead us to form or adopt the terms, True, Beautiful, and Good?

IV.

In searching within our consciousness for the simplest experiences which we designate by the words in question, it can hardly be doubted that these experiences may all be reduced to certain sensations or feelings of personal satisfaction. This sensation or emotion may range from the lowest stage of mere comfort to the highest expressed by the words joy, enthusiasm, and rapture. And the opposite sensations, ranging from

mere discomfort or uneasiness to the acutest sensation of aversion and mental suffering, are correspondingly described in terms such as falsehood, ugliness, and evil.

It seems that we cannot get down to any deeper ground or foundation for these various terms than that of the difference between what we, in a lower or higher sense, like or dislike. Perhaps we may say that these likes and dislikes which are inborn in our nature and occupy a large expanse in our flow of sensations arise from feelings of harmony or disagreement between our sensations.

Thus even the most prosaic want of consistency in matters of fact may create in us an unpleasant feeling of jar, whilst the term harmony is intelligibly used to denote the higher properties of what we call Beautiful or Good.

And if we look a little further into the matter we not only reduce the sensations or feelings in question to a common subjective denominator, namely, that of "like and dislike," but we also discover a common objective denominator; we are able to find a word which embraces in a certain way every one of the three ideas with which we are dealing. This word seems to be no other than the first of the three terms, namely, Truth. Truth has a narrower and a wider sense. In the narrower sense it refers to matters of fact; in the wider sense it applies also to creations of the imagination and to moral ideas.

In this way, through its connection with the creations of art and with the precepts of morality, Truth attains in a certain way supremacy in the emotional world.

Instinctively also we seem to attach to Truth in the highest sense a greater reality or degree of independent existence than we attach to any other abstract notion. Many extracts from profane and sacred writings, from scientific, philosophical, and poetical deliverances, might be collected to show that Truth occupies a prominent if not the foremost place in our spiritual vocabulary. All three ideas acquire what we have termed a double existence, that is, they are not only expressive of subjective experiences, but have an independent existence through the fact that we have individually learnt them and use them in our communion with other persons; that we have been able to attain to a certain degree of unanimity on these matters with our fellow-men. This agreement is certainly not complete, except perhaps temporarily in the region of matters of fact; but it is sufficient to take us out of our self into the larger world which we inhabit in common with other persons. Through this property of a common possession and use, these conceptions satisfy the first condition which we found to belong to Reality.

The second condition, namely, that of clear definition and individual existence, does not seem to belong to special kinds of beauty or goodness; and to truth it belongs only in the lower sense of matter of fact. Still less can we arrange these different values in a clear order of higher and lower: all attempts at classification of different kinds of beauty or of duty and virtue have so far failed to gain general acceptance. But when we come to the fourth condition which we found to belong to real things, we instinctively feel that it

is certainly fulfilled in the case of the three ideas we are dealing with. It has been a conviction running through all the deeper thought of ancient and modern times, be it religious, philosophical, or poetical, that truth, beauty, and goodness cannot be separated from each other, that they belong together, forming a system or hierarchy of their own, a world for itself which in various forms of expression is elevated beyond and contrasted with the world of common life. The grandest example, towering above every other deliverance in the profane literature of the ages, is the Platonic world of ideas, which like the heavenly vault spans over our earthly existence.

A closer and more detailed expression of this spiritual system seems indeed impossible, but the unity which we attribute to the triad of Truth, Beauty, and Goodness, expressed in the word Holiness, has its counterpart in what we have just stated, that in the subjective sphere of our emotional life the idea of truth seems to link together all the highest sensations of which we are capable.

V.

As the logical definition of the three terms we are dealing with seems impossible, we are driven back to an examination of the subjective or personal way in which we have individually arrived at an understanding of them. And here we must admit that a simple answer is hardly possible. The cause of this, as we have already said, lies in the circumstance that these terms are used in the speech addressed to us in our

earliest years, long before we are able to form definite abstract notions, and that we also learn to use them long before we realise their meaning. Also this meaning attains to very different degrees of clearness with different persons. It seems pretty certain that there are persons who have a very slight, if any, notion of beauty or goodness; it is difficult to impart to some children notions belonging to these two regions of thought and feeling; whereas there are others whose sensation of the beautiful and the good is so strong that it seems almost inborn. The whole of this subject therefore opens out a large view of individual psychological differences and peculiarities, and forms a wide field for psychological observation.

We will therefore in the first instance limit ourselves to the one question, How does the idea of Truth enter the child's mind? It certainly seems easier to convince others of what is true or untrue in any individual case than to attain agreement with them as to beauty, goodness, or the opposite. This is borne out by the fact that there exists no human tribunal which decides as to what is beautiful or good in the higher sense, whereas the courts of justice are mainly occupied in ascertaining truth in matters of fact, and generally arrive at practical agreement: on the other side, the verdict of beautiful is proverbially considered to be a matter of individual taste; and the question of moral goodness is one which every person must, as we say, settle with his own conscience which is his highest tribunal.

CHAPTER VIII.

OF TRUTH.

I.

THERE are many ways in which the child's mind may become familiar with the conception of Truth, yet there is one way which seems to be marked out as more generally trodden than any other. This is embodied in the term Veracity, or Truthfulness in speech and action. In endless instances, in stories both true and imaginative, the lesson is taught that to speak the truth is almost our first duty, and that the reverse, falsehood, is detestable. Nor is it difficult to find the reason why such paramount importance is attached to this quality of veracity. The common saying that one untruth or lie destroys all the faith and trust that others attach to your word and action indicates this reason.

We need not repeat what we have so frequently dwelt on, that our whole early mental life is built up on the communion with other minds, which are known to us not directly like external things, but indirectly only through speech, gesture, and personal contact.

And similarly, only a small portion of our own inner life in the shape of physical sensations is our common property with others. As all mental progress de-

pends on mutual understanding in the region of our hidden thoughts and feelings, it is of paramount importance—in fact a *sine qua non*—that our means of communication with others should as nearly as possible agree with, and be an expression of what we and others secretly think and feel: the hidden portion of our stream of thought should be revealed simply and clearly in our speech and intercourse. Unless this is made the cardinal principle in speech and action, subjective interchange with others becomes impossible. The person who is devoid of veracity figures or tries to figure in the world as a different being from what he really is.

Society in the narrowest and widest relations is built upon the bed-rock of veracity and trust.

Assuming then that we are introduced to the deeper and wider meaning of the term "Truth" through the quality of veracity, we may look upon the moment when the importance of this mental property dawns upon the child's mind as the introduction to a new world. And in a sense similar to that in which we conceive the appearance of a person within the field of a child's consciousness to mark its entry into the world of external Reality, we may now look upon the idea of Veracity as affording an entry into the world of inner or higher Reality. From this point an ever extending and enlarging view of these Realities is gained in the course of our life, in the same way as from familiarity with one or a few persons and things the child acquires the notions of human beings, things, and its own personal existence. In both cases, the process of mental development is twofold, leading us both outside

of and back into ourselves. In the case of Truth we learn gradually to distinguish between formal and real Truth, between Truth as a matter of fact, as a relation, and Truth in the form of Beauty and Goodness. Speaking generally, we learn to distinguish between Material and Spiritual Truth.

And secondly, the developing soul learns to apply the term Truth to its inner life, to that portion of its stream of thought which remains for ever hidden from the gaze of other persons. With this second aspect of the process of the growth of Truth in the human mind, we shall have to deal later on; for the moment let us consider the two commonly distinguished aspects of Truth—Formal and Real.

II.

There seem to prevail in philosophical writings two distinct definitions of the word Truth, and following therefrom two distinct theories. They may be most conveniently described as the "Consistency" theory and the "Correspondence" theory.

According to the first theory, Truth is essentially consistency of thought and knowledge. Our speech and thought must not contain contradictions. This is a purely formal or logical requisite, the recognition of which is continually forced upon us—entering into theory and practice, the affairs of daily life, and the higher regions of abstract thought. In fact, a very widely accepted definition of philosophy maintains that the object of philosophical thought is to

bring agreement, consistency, and harmony into the scattered trains of ordinary thought. But very frequently a further condition is attached as the character of all deeper, wider, and higher knowledge. This further requisite is usually defined by saying that Truth consists in the agreement of our thoughts with the things or objects we are thinking about. According to this view, the two kinds of Truth may be described as formal Truth and real Truth.

Now it is of some importance to remark that from the point of view which we have established and followed out in this treatise, there can be ultimately no essential difference between the two kinds of Truth.

For according to our view, things do not, for us human beings, exist separately from or outside of the whole course of our stream of thought or our mental firmament.

The difference between things and sensations or thoughts consists for us merely in this, that some clusters of sensations, or of abstract thoughts, have become so clear that they detach themselves from their surroundings in our field of consciousness, and that in many though not in all instances they are possessed also by other persons with whom we can carry on fruitful communication and intercourse regarding them; they form in this way a world by themselves which seems to be, but is not in reality, outside of our personal or subjective region of sensations and thoughts.

To this statement two objections may be urged. First, it may be said that outside things contain a great many qualities which have never come under our per-

sonal observation, and can therefore not be described as belonging to our personal experiences, sensations, or thoughts, but which nevertheless must be taken into account if our ideas about them are to be correct or truthful. In fact only a very small portion of what constitutes for any one of us the outside world is derived from our personal experience. By far the larger portion is supplied to us from our infancy onward by other persons, in one form or another. In consequence of this, if we speak about things, including persons and relations, we really speak of an accumulated mass of observations and experiences by a large number of persons, with whom we have come into direct or indirect communication. This large mass of detail is arranged in the mind of each one of us in a certain order possessing a certain consistency and stability, resulting in a more or less comprehensive image forming a whole, of which, however, the small amount of purely personal experience, sensation, or thought which it contains, is, as it were, only the nucleus or crystallising centre. If we think of outside things, we do not think of them only as possessing what our very meagre personal acquaintance has furnished: we think of them as the integrated images which exist in the minds of our fellow-men. And even so far as our own experiences are concerned, we are in the habit of repeating the same many times before we are prepared to attribute to them external reality, and place them in the outer world. A single sensation or experience may indeed be so vivid and impressive, that without repetition and without the confirmation of other persons we may consider it to be real, that is, objective and not

merely subjective; but we could never in such a case convince others of this Reality, and we should experience some difficulty in silencing all doubt on the point even within our own mind.

Truth then is the agreement of definite thoughts or images within our mind with the accumulated and integrated experiences of a large number of persons, both living and departed.

But a second difficulty may be urged. Statements which we individually make concerning matters of fact may refer to things or events which have never formed part of the experience of anybody, and may perhaps never do so. Things and events of this kind are, *inter alia*, physical facts which are quite removed from the horizon of any man's observation, and events which took place in past times of which we have no record either direct or indirect. Such things as have never entered into the actual experience of any one, nevertheless exist as certainly as others which enter into the accumulated and integrated observations of living or departed persons. For instance, the interior of our globe presents, no doubt, certain features which science may attempt to describe in terms which have been arrived at by logical deduction from known and observed data, and we may then put the question whether such description is true or not. It has to do with a thing which nobody has ever seen or will see. And again, historians may make conjectures as to events of which there is no memory, interpolating between authenticated facts others of which we have no direct or indirect record. In all such cases Truth would consist in the agreement of our thoughts and sensations with

something that has never entered, and possibly will never enter, into the field of consciousness of anybody.

The answer to this difficulty is the following: The things in the outer world which we profess to know by our own or the accumulated and integrated experience of our fellow-men, present and past, cannot be isolated from the connections in which they stand to other things which surround them in time or space.

Thus, in the physical world, a definite thing cannot be completely described or understood by making ever so minute and complete a description of its physical properties. Already in Chemistry we have to go beyond the physical qualities of any definite piece of matter which we wish to describe; for we have to deal with the actions and reactions of such a definite fragment in the whole of its surroundings; and even in the purely physical world a distant invisible star may give evidence of real existence through its disturbing influence on other stars which are visible. Everything in the outer world exists therefore not only in what we may, for the sake of convenience, call its individuality, but just as much in the totality of the relations in which it stands to other things.

We thus come to the conclusion that Truth consists in an agreement or harmony between inner experiences which we may either possess or have possessed ourselves, or may have adopted and assimilated in and through communion with other persons. And the totality of all this experience which we can only imagine, but never actually realise, presents itself to us not only as true, but as the Truth, the word Truth being elevated from a mere adjective or relation be-

tween things to the position of a substantive, appearing thus as the highest Reality of which we can form any conception—Truth and Reality becoming synonyms.

But used in this highest sense, we instinctively feel that Truth is more than the mere fact; it becomes one of those Realities which we cannot contemplate without emotion, and in this way reveals to us its connection with the other highest Realities of which we have discoursed in former sections.

To develop this side more clearly, we must extend our analysis beyond the limit within which it has been so far contained.

III.

It was through the idea of Truth that we were able to enter into the region of those higher verities or realities which include the Beautiful, the Good, and the Holy.

Truth appeared to us to be a portal opening the way into what Plato termed "the World of Ideas."

We also indicated the way in which the great quest for this may possibly enter a child's mind, namely, in the narrower and simpler conception of veracity.

It may, however, be observed that not only the question of truthfulness, but also the entire problem of the intellectual equipment of the human mind was treated in the foregoing from a purely contemplative point of view. Such a view, it may be maintained, is one-sided, as there can be no doubt that neither the adult's nor the child's mind is ever, for any length of time, purely observant and receptive.

Experience in both cases consists in an alternation of perceiving and acting.

Indeed, we may lay it down as a fact that not rest but restlessness is one of the primordial attributes of experience, and that it constitutes one of the principal tasks of education to regulate and control the primordial restlessness of the developing human mind.

It is likely that the physical restlessness so characteristic in the early period of infancy is quite automatic, and arises unconsciously. Here also we may suggest that it is not through its own aimless movements that the child becomes aware of motion and change, but that these are also attributes of that first image of Reality which emerges out of the twilight of consciousness in the form of the person or persons who are the first companions of its earliest existence.

We may here make use of the symbol which we have repeatedly employed in picturing to ourselves the state of our earliest, as of our developing mental life. The physical firmament contains not only the fixed stars and their fixed constellations, but it contains also wandering stars, including among them the great luminaries, the Sun and Moon.

A chart of the heavens showing the different constellations does not contain the most important of the heavenly bodies which surround us. These latter, through their wandering habits in their proper motion, cannot be located on a map or on a globe. They form an assemblage by themselves; choosing, as it must have appeared to the first observers, their independent course, the rule and order of which have

only been fixed after long-continued observation and calculation.

In a similar manner the person or persons who surround the infant mind must early appear as differing from other external, though equally vivid and definite, clusters of sensations. Their proper movement distinguishes them from the stationary or more regular moving background and environment of lifeless things. The latter can, however, enter into this proper movement if connected with the movements of persons.

The mind of the child will, next to this, observe a similar independence or freedom of motion attached to one special cluster of external sensations which it learns to regard as its own body, and it soon finds out that many of its own movements are accompanied by feelings pleasant or unpleasant, giving rise to desires or aversions, to likes or dislikes, to joy or pain. It is thus introduced into the world of action.

At this stage of mental development a remarkable property of infant life becomes manifest, at first unconsciously and then consciously to the infant itself. This is the property of imitation.

IV.

Imitation constitutes such an important factor both in the life of the infant and of the adult, that it has rightly been considered to be one of the principal vehicles of mental growth and development. For our purpose it is important to point out how different the

phenomenon of imitation appears to be under the older aspect which most psychologists, following the common-sense view, have been impressed by, and under that which we have adopted in this treatise.

According to the former view, imitation is the repetition within the stream of thought of something that has happened *outside* this stream of thought. This view locates the event which is imitated outside the imitating consciousness. Now, according to our view, everything that happens, be it a single sensation, a cluster of sensations, or a change of sensations, is simply one of the many experiences which constitute the flow of our conscious life ; it occupies a definite place *inside* the firmament of thought. Imitation is simply the repetition of what has been experienced, accompanied indeed by some indefinable conscious or unconscious feeling which we call effort.

If this view is correct, imitation reduces itself to repetition which is a more general trait in mental life ; and, we may add, the more general and frequent the further we go back in the mystery of the individual mind.

It is well known that children are very fond of repeating or having repeated to them actions or stories which have impressed them in a lively way. It is also well known that scenes, sounds, and melodies which have impressed us dwell with us and recur again and again, causing us increased enjoyment, or it may be haunting us in a distressing manner. Infants and children are taught not only to act but also to speak by repeating or imitating for themselves what they

have seen or heard: it is their own experiences which they choose or are asked to reproduce, and the more lively the first event has been, the more fitted will it be to draw after it a spontaneous repetition.

But we can go a step further back in our analysis of experiences, and say that certain of these experiences, be they sensations, perceptions, images of memory, or fancies of imagination, called forth, whether at rest or in motion, other experiences similar to them. We may term this phenomenon that of Association of single or complex experiences. And this large class of mental phenomena includes what in conventional psychology is termed "the Association of Ideas." Thus it includes not only those forms of Association which Hume pointed out, but also the many ways in which repetition and habit produce sensations and ideas, and distinctly also the many cases of imitation just alluded to. Certain conscious or unconscious movements are associated with definite sensations or perceptions which may be suddenly introduced into the field and flow of consciousness; or which may be called up by memory or created by imagination. But whatever these experiences may be which in some unexplained manner call forth other experiences, they are, all of them, located within the flow of our thoughts, having a place within the confines of the firmament of the soul. There is according to our view no essential difference between what we conveniently term "outside" and "inside"; for all experiences—be they the sudden impressions which come upon us without our knowing or acting, or those others which may follow them—are equally situated

on the same moving plane of our inward field of vision.

Thus the doctrine of the "Association of Ideas" must be revised and re-written from a wider point of view. Reverting now to the phenomenon of imitation, we may say that imitation is probably unconscious on its first appearance, but it soon becomes conscious and is associated with the intellectual interest which the child's mind increasingly takes in in the happenings which surround it. And connected with this interest, which marks a selecting process, is the feeling of effort accompanying such movements as are of special interest.

The feeling of interest is probably the first sign of what, in the developing consciousness, presents itself as value: interested movements or interesting things acquire in the acting and observing consciousness a new property which, though entirely subjective, soon becomes projected outside as an attribute of things and events in the objective world.

But it is well to remark here that the attributes of interest and value never attain that objective reality which attaches to definite sensations or clusters of sensations.

The attribute of interest or of value hovers, as it were, between the object and the perceiving or acting subject. We are not able to share the feeling of interest or appreciation so completely with other persons as we share, or think we share, certain definite sensations. These feelings of interest and value change also very markedly in our own experience. Things we admire, or occupations we delight in, very

rarely retain their hold on our mind for very long or in the same degree, and these changes of interest and taste are more rapid the further we go back in the conscious life of the soul, whilst in old age these feelings become mostly less vivid and not infrequently die away altogether.

CHAPTER IX.

OF ACTIVITY.

I.

THE fact that the conscious or unconscious movements in our earliest days are checked either by persons surrounding us, or by lifeless things which we encounter, is one of the most important causes through which our practical or social sense becomes circumscribed, defined, and fixed in our own consciousness. And the further fact that this small sphere which becomes marked out within the large field of consciousness contains by far the larger proportion of feelings of pain or pleasure and of active or restricted changes, contributes more than anything else to give importance and prominence to this our practical or social self; throwing into the background most of those experiences which are not immediately connected with our moving and active personality.

Such are, *inter alia*, the wide and increasing regions of memory or of creative imagination and dreams of fancy.

We early become aware that this check to our conscious or unconscious movements is mostly due to the action of other persons in the physical or outer world.

But it is not only by the physical restraint and resistances we meet with that we form a new experience; there is, in addition, a vague and undefined feeling connected with the presence of other persons, especially of those who are our daily companions.

As the intellectual intercourse between mother and child is not limited to experience of the physical senses, but consists to a great extent in an undefinable purely mental or emotional communion, so also the checks we receive, or the liberties we are allowed, are not by any means all physical; they consist in an undefinable sense of discouragement, or encouragement, accompanied by feelings of discomfort and dismay, or their reverse: ease of mind, happiness, and exultation.

The general result of this repression or encouragement of our physical and mental movements is the division of these movements into two classes,—those which meet with success and create satisfaction, and those others which fail and are accompanied by disappointment, which may be more or less acute and painful. To shun or avoid the latter, and to repeat the former, is the inevitable consequence of this division.

We stated above that the primordial data within the range of consciousness which lead to this active life seem to be the inborn restlessness, both physical and mental, the ever-changing stream of sensations and actions, physical and mental, on the one side; and on the other side the regulative influence of conscious or unconscious imitation of the action of persons who surround us. Imitation is not limited to casual observation and intercourse, though this is

most important in the earlier stages of our mental development.

Memory and imagination enlarge enormously the field of our sensations, and some remembered or imagined events become so vivid and distinct that they react on us with a force equal to that possessed by actual experience during our intercourse with other persons. We involuntarily imitate or give actual reality to the imagined movements which we contemplate with our inward eye: they form the directive ideas which control the never-ceasing movement of our sensations and thoughts.

In this way they form a self-created purpose in our mental life. Our actions have become purposeful, having an aim and an end.

We now see that the picture we drew of the original state of our awakening consciousness was too meagre in its outline. In its chaotic state it not only contains the dim tracings of persons and things, but also the confused medley of our physical and mental strivings. These two classes of our experience are intermingled. What we term the external features of persons become distinct and lively to us only in connection with the changes which they present; and in the same way when we gradually arrive at a consciousness of our own physical and mental self, the features of this are not stationary but intermingled with continued action. There is thus a continued but changing connection between things we see and actions accompanying them; either of which rise into distinctness with the decline of the other. Too much restlessness prevents us from seeing things clearly, taking the word seeing in the

widest sense as meaning mental awareness. And *vice versa*, close attention to physical or mental sensations as well as intense emotion may check automatically the habitual restlessness of our inner self.

This unvarying connection between sensation and action—taking these terms in the widest sense—should have been included in the doctrine of the Association of Ideas, for it forms the most fruitful cause of the gradual development of our purposeful action, and of the achievement of self-control, self-direction, and self-government.

II.

The various encounters which happen to us in early life, both with lifeless and living things, tend, as we have stated, to draw more closely and narrowly the sphere of those sensations and actions which we gradually learn to call our own. In this way our social self or personality becomes more and more circumscribed and defined.

But as already stated, our encounters with lifeless things have a very different effect upon us from those which living things and especially other persons have. The checks which we receive from lifeless things contribute to our information about them as well as to the knowledge of our own powers. Were they the only experiences of this kind, they might teach us prudence and foresight, or they might fill us with joy or with the contrary, that is, with fear. Such an education is, however, quite unthinkable, for we have seen that the conscious intercourse with persons precedes that with lifeless

things. The intercourse with persons leads us not only to knowledge, calls forth not only pleasure and pain, but produces also a reaction in us which is the first appearance and the earliest form of that affection which we term Love. Wherever this affection makes itself felt and enters into our sensations, or active strivings, we seem, as it were, to enter a different and special region of experience which is the beginning of what we call the moral world.

Thus we are again impressed by the fact that it is only through communion with other persons that we gradually pass from the simpler stages of personal and subjective life to the higher, the more important and interesting.

It is probably also through intercourse with persons that the child first becomes aware of what we term the freedom of its will.

The freedom of Will, in whatever way it may be defined, explained, or explained away, is not a problem for introspective psychology, for there is no fact of the inner life better and earlier known to the child or even the infant than that it has freedom of action. No words in the early speech of a child are more familiar than "will" and "won't." This experience is one of the earliest and most essential in any rational being.

The doubts concerning Free Will which have arisen among philosophers and divines are not shared either by children or by the majority of grown-up persons.

How they have arisen is a problem that will occupy us at a later stage of our analysis.

The child also very soon learns to distinguish between such of its actions as are limited by lifeless objects, and

those others which are only partially limited through the influence of other persons and the expression of their will. It distinguishes between the checks and impediments of its external surroundings and the commands of persons. Whereas the former give rise to the notions of possible and impossible, the latter give rise to the different distinction between right and wrong.

It is likely that the idea of wrongness does not enter a child's mind before it has disobeyed the commands or wishes of those with whom it habitually communes. Transgression comes before the notion of guilt; and without some feeling of guilt it does not seem that the distinction of right and wrong could enter the human mind. And it seems equally necessary that the wrong course of action should be followed by some unpleasant sensation or experience such as to mark it out as something to be avoided.

The word in which these relations between the child's soul and those who surround it are gathered up is obedience. Through the word obedience, the child learns its earliest duties and obligations, or we may say, obedience is the child's first form of morality.

We stated above that veracity is the first stage of morality—*i.e.*, the first notion through which the idea or precepts of morality are introduced. But this is preceded by the notion of obedience through which the form of morality is introduced.

This call for obedience is gradually further developed into the more complicated notion of duty and obligation. The purely personal relation of obedience is deepened and widened, and the place of single definite persons is taken by the wider notion of society, of

dependence on our surroundings, both physical and mental; and both these extensions give rise to a feeling which we may term absolute dependence.

We vaguely or clearly become conscious that we live under what we may call the pressure of our surroundings, be they physical, social, or spiritual. This experience forms the beginning of the religious sentiment. It leads us to ask two definite questions—viz., What is the nature of this feeling of pressure or obligation, and whence does it come to us?

Whoever recognises the fact of this dependence, not only in the physical but also in the social and spiritual world, has the religious sentiment in its widest sense. Whoever, in addition, possesses or seeks a definite answer to the second question, Whence this feeling of dependence comes to us, has not only the religious sentiment, but has, or desires to have, a definite religion or religious creed.

From this point of view we may say that a person may be truly religious without having a definite religious creed. This religion consists in a feeling of obligation or dependence, whilst he may intellectually find it impossible to formulate a definite creed.

III.

The habit of obedience, which should be one of the first results of early education, introduces the human soul to the recognition of Authority.

Authority is at first limited to the command of one or a few persons, who, if necessary, can enforce their will

against our own desires or actions. Gradually this narrow conception of Authority becomes wider, and when we see that others also, and notably our parents, masters, or friends, recognise equally some form of constraint and exercise self-control similar to that which they expect from us, the centre or seat of Authority moves away in our conception to a greater distance, describing, as it were, a larger sphere and defining a more general power.

The feeling of obligation grows or should grow into a general habit of responsibility for our actions: these actions are dictated and judged not only by their immediate result, but also by bringing in the question whether they satisfy or offend that feeling of responsibility which we call conscience, producing, besides the feeling of success or the reverse, also a feeling of self-approval and satisfaction, or its opposite, self-reproach, regret, and remorse.

It must not be supposed that this analysis of the origin, nature, and growth of the moral feeling of obligation is, in general, clearly experienced by the developing mind. Most children in the present day probably grow up with very indefinite notions as to the nature and location of that Authority which they more or less recognise when once they leave the stricter control of their younger days. Without some ever so vague conception of the existence of a higher command it is impossible to see how members of human society could live and act together; for self-control and self-limitation are the first conditions not only of peaceful intercourse with others, but even of such intercourse in any manner.

Various theories have been advanced as to the form which this feeling of responsibility actually takes, and it is probable that these different theories are all more or less correct if we consider the enormous varieties in human nature and character.

We need mention here only a few of the different views which have been taken of the nature of moral responsibility. The simplest and probably the oldest is the conception of a higher Power, which is conceived by analogy with our earliest experiences as that of more exalted persons, or as that of a single and Highest Person, the Deity. This is probably also, even at the present day, and in spite of much criticism, still the most popular and widespread view as to the supreme seat of Authority.

Various doubts, raised both on the ground of intellectual and moral difficulties and dilemmas, have ever since the beginning of philosophy tended to loosen the belief in this first, simplest, and most natural theory of the World and Life; replacing the theistic doctrine by a variety of different theories such as fatalism, Pantheism, or a universal cosmic order; and these different theories may be either spiritualistic or materialistic. Comparatively recent is what has been termed "Agnosticism," a theory which denies all possibility of explaining in any way the origin and nature of the ultimate order of things, and *a fortiori*, also of the moral sentiment.

It is, however, interesting and significant to note that some of the most staunch upholders of the Agnostic position are quite as firm in maintaining the existence of a moral law or order, which they consider

strong enough to hold its own without any doctrinal support.

Of this position, Huxley may be considered, at least at one period of his philosophical career, to be the clearest exponent.

IV.

In the foregoing we have attempted to trace the different abstract conceptions with which we operate in adult life, to their beginnings in the soul of the child or even of the infant.

We have not attempted to define more closely the succession in which these different ideas arise or develop. It is probable that they mutually assist each other to emerge out of the primordial chaos of sensations, emotions, and feelings; also that in different persons, the order of appearance is very different. In some, what we term the moral nature may show itself earlier than the affections or the intellect; in others, the feeling of moral responsibility may come much later than intellectual alertness.

But in whatever order these ideas rise to greater or lesser clearness, or in whatsoever way they may interact, it seems almost certain that the recognition of a person is the first important step in the clearance of the child's mind and the brightening of its outlook. For, in the image of such a personal appearance, there are not only seen the multitude of physical features, but closely connected with them likewise a multitude of sensations, affections, and feelings which give what we may term life and vividness.

Although this genesis or succession of intellectual and moral ideas cannot be distinctly traced, we have in the foregoing tried to put our finger on the exact points in the developing field of consciousness, where there first arise the ideas of Reality, Truth, Beauty, Goodness, and Duty. These different points are, to sum up: (1) the image of a person or persons, opening out the world of external and internal Reality; (2) language revealing the inner life of others, requiring a correspondence between thought and speech, that is, Truthfulness or Veracity; (3) the experience of pleasure in the agreement and its opposite in the disagreement, between our sensations or our feelings, leading to the higher and more abstract idea of Harmony; (4) probably much earlier, the experience of Free Will, and of its enforced or self-imposed control; and last, the recognition of Authority, demanding obedience, which is not only purely moral, but may assume the spiritual form of trust and religious veneration.

We must now proceed to trace in each of these directions of development the more detailed features as they arise and make the mental life more complicated and intricate, but also more definite and purposeful. We have already dwelt at some length on the analysis of the purely intellectual process. This predilection for the intellectual side of our inner life is natural, for it seems probable that it is mainly through this that the human being has risen beyond the rest of the higher species of the animated world.

Even the emotional and moral endowments seem to rise into greater distinctness through their association with developing intellectual life. The cause of this

seems to lie in the fact that of all living beings, the human being is the only one which requires a long period of close association with parents and companions before it is able to live independently and freely. And during this period, consciously or unconsciously, the most time and care is given to the gradual drawing out of the child's intellectual faculties.

Only in the region of these does it seem that a tolerably general agreement has been arrived at; and so this line of development has been specially marked out in the general process of education as that which can be almost universally applied. This is the department of Instruction—*i.e.*, of teaching and learning—which is vastly more defined, and in general more successful than the remaining region of education in the more specific sense, which comprises the guidance of the Will, the refinement of the feelings and emotions, and, in general, the formation of the character.

So much is this the case, that in recent times a distinct division has been proposed between instruction and education; it being held that, for instance, instruction can be entrusted to an impersonal authority, say the State, and carried out on definite lines, and a rigid system, to which every young person can be asked to submit to its own advantage; whereas the higher and deeper tasks of education should be left to the special care of the personal surroundings in which every child is born and placed—*i.e.*, to the home and family.

This proposal, though theoretically sound, is practically impossible, as by far the majority of human beings are born into surroundings little suited for this

important task of education in the deeper meaning of the word.

Already in the time of Plato and Aristotle, this want of adaptation had become evident, the authority of the family and of local associations having broken down; and so they made their authority the Ideal State. At the dissolution of the Roman Empire, St Augustine opposed to the city of this world the "City of God"; and for Christendom the authority over education has been the Church in one form or another. Since the French Revolution, the scheme of State-directed instruction, from which religion is excluded as sectional, has come forward, especially on the Continent. Its weakness is that the family and the other associations to which the secular system would leave the training of the will and the affections, have again lost their old authority. The most serious attempts at reconstruction have been made by two French thinkers, Comte and Renouvier. Comte, while he rejected all theology, followed the Catholic tradition in making his supreme educational authority the "Church of Humanity," and not the secular State. Renouvier, on the other hand, while he was in philosophy a Theist, was opposed to every derivative of theocracy, and inspired a movement for the laic teaching in schools of an ethics of right and duty. As this, however, was thought out in relation to his own philosophy, we seem to be brought back always to a doctrine—Theist or Humanist as the case may be — for ultimate direction.

CHAPTER X.

OF THE PRINCIPLES OF EXACT SCIENCE.

I.

We have already learnt that the development of the intellectual powers of the human mind depends upon a selection of that class of sensations which we term physical. This selection is not due only to the greater clearness and permanence of certain of these sensations, but quite as much, if not more, to the fact that we very early learn that we have them in common with other persons who surround us.

The great multitude of these sensations, all clearly marked off and located in their spatial arrangement, is not only largely increased by their being retained and reproduced through memory, but quite as much through the further circumstance that we learn from other persons a great deal which we could not possibly gain by ourselves alone. We are apt to forget that the picture of what we term the outer world, that is, the totality of physical sensations, is neither a result of our own experience alone, nor a possession proper to any one of us independently. The image of the outer world as presented to the synoptic view is really a collective result of the

conscious or unconscious labour and experience of innumerable minds. This is the reason why we are justified in speaking of a general consciousness and of common-sense. By such terms we express the conviction that the outer world is in a certain sense the same for every one of us, though if we look deeper into the matter, it is just as correct to say that each individual person's view is different from that of all other persons.

Recognition of this difference leads us to a still stricter selection in matters of external experience. It is the first step in the scientific refinement of the Knowledge contained within the region of common-sense. It is the beginning of a lengthy process of delicate analysis which on its way discards a vast amount of the experience gained unconsciously in the course of our life. Only after long periods of random search, carried on in very different ways, did the selection and the refined analysis just referred to arrive at that stage of simplicity and definiteness from which a systematic foundation and method of progress could be laid down and firmly established.

The result gained by this comparatively recent method of Analysis and research is equally remarkable in two directions. In the first place, what is termed exact knowledge has been enormously increased, and still greater is the field of application of such knowledge, through which all conditions of life in civilised countries have been radically transformed; a vast number of artificial conditions have been created; and the whole of life and society has been rendered so complicated that we can hardly even imagine the

surroundings in which civilised people in not very far distant ages carried on the business and work of life.

But in the opposite direction it has become strikingly evident that all this accumulated knowledge, all this exact science with its multifarious applications, has proved quite incapable of dealing with those deeper and higher interests which spring from our inner emotions and desires.

Thus the distance between the highest and most refined scientific theories of the fundamental order of things and the practical questions which every now and then present themselves in our individual as well as our social life, seems greater than ever. So much is this the case that some of the foremost abstract thinkers have professedly admitted that Agnosticism is the only attitude possible from a purely scientific point of view. This opinion has again reacted on the common-sense view of things, and strengthened the conviction, which has never been totally absent, that there must be some other form of knowledge, and some other avenue that leads to Truth, than the otherwise rightly glorified method of exact science.

The view which we have attempted to explain in this treatise supports this conviction, and, as we shall try to show in the sequel, explains how the scientific point of view inevitably narrows the field of the vision to which we are limited if we desire successful practical application; but it also suggests the existence of other rudiments of thought within the area of our primordial consciousness. The latter may be considered as containing a fund of undeveloped ideas

which can be drawn on, and of which, for the immediate purposes of life and practice, the aggregate of physical sensations is of the first, but by no means of sole or even of the highest, importance.

This will become clearer as we proceed in our more detailed exploration of the purely intellectual region of the field of consciousness.

II.

The development in the course of our life of the purely intellectual process begins much later than the acquisition of bodily and mental habits. These, having as it were the first entry, retain their hold and also influence very largely, though frequently unconsciously, the process of clear reasoning which forms such an important attainment in later life.

Neither the primitive man nor the child of to-day is introduced into conscious existence by those processes which we now consider to be the fundamental elements of knowledge.

But the difference in the educational process to-day from that which must have been practised by primitive man is very marked.

Comparatively early in life the child is now introduced to artificial devices which have taken long ages to bring into the form in which they are now presented to its mind. These devices are, *inter alia*, pictures, models in the shape of toys, letters of the alphabet, numerals, geometrical figures, maps, &c., &c.

It will be seen from this incomplete list that the

means of instruction as they advance become more and more mechanical and diverted from that surrounding of emotional and imaginative life which, at the earliest stages, make them attractive. This is increasingly the case in our present system of education, and the more so where instruction and education are rigidly separated.

The introduction also of technical knowledge and handicraft, in the place of the older customs, tends in this direction.

As the human mind can at any one time only bring into consciousness a small portion of its manifold experiences stored up in memory, the great stress which is now laid upon exact, as opposed to scholarly attainments, has the effect of repressing the emotional and imaginative elements which are always more or less brought out in the teaching of languages, in spite of the dryness of etymology and syntax.

Looking into the future, we may safely say that instruction is tending to become more mathematical and less scholarly; accurate information, useful in practical life, taking the place of the more diversified knowledge gained by reading and by the less systematic observation of natural things.

Yet in the fuller development of mental and moral life, this tendency to extol mathematical and mechanical exactness and accuracy is not without a harmful influence. The mathematical treatment of any subject, especially that of complex subjects, is based upon some of the most refined thought and speculations which the human mind is capable of. At the same time these fundamental thoughts or principles can be put into such simple form

that their intricacy and beauty disappear in the rule or formula which is handed to the practical worker who, in general, handles this refined instrument without any knowledge or appreciation of the abstract principles which underlie its construction.

Whilst the number of practical applications and mechanical labourers enormously increases, the intellects which discover and understand the fundamental principles remain extremely rare. Knowledge consequently in this region becomes more and more mechanical and superficial.

It is a notable fact that the grasp of mathematical principles is far more rare than aptness and proficiency in scholarly attainments. It follows therefore that the result of modern schooling for the majority of minds must mean a far larger proportion of purely mechanical achievements and a smaller amount of individual and subjective thought.

One of the principal features in the world which presents itself to the child's mind in the course of its advancing years, is that of order, regularity, and uniformity, and it is upon this feature that most attention is directed. We are not only taught to see order and uniformity everywhere around us, but we are also induced to regulate our behaviour on these lines.

This tendency to find and to practise order and regularity everywhere has been enormously increased through the progress of science and mechanical invention, so that the great principle of the uniformity of nature has become latterly a sort of gospel for the student, not only of the Physical, but also of the Social World. It is a common occurrence in the history, not only of the natural

sciences, but also of those concerned with human life, both in society and in individuals, to emphasise and exaggerate any and every new relation which has been discovered and found to obtain in restricted regions, facts, or events. And this is especially the case where such relations are simple and mathematically definable. When the law of gravitation was established by observation and calculation of cosmic phenomena, a tendency at once arose to generalise these simple relations and to find in a comprehensive formula of Attraction the key which would unlock the secret of the physical world.

Similar generalisations have since been propounded as the simple relations contained in vibratory motion, or in the fixed proportions of chemical combinations, have become established. In more recent times, statistical regularity, vortex motion, and biological formulæ, such as that of natural selection and that of crowding out, have ruled supreme in various branches of physical and social science. All these, and many other discoveries of arithmetical or geometrical regularity, have been at one time or another extolled as fundamental principles and their general usefulness vastly exaggerated. They have nearly all proved to be one-sided, frequently incorrect, and in consequence misleading. For a time indeed they were all extremely fruitful in extending natural knowledge; but like a fertilising river if spread over too large an area, they have dried up and ceased to be vitalising principles.

III.

When we realise that the whole region of physical sensations which constitute the outer world, forms within our consciousness only a very small portion of its total content; when we further reflect that this region has attained its apparent continuity and completeness through the co-operation of thousands of observers who have perpetuated their findings by symbols and images, so that any individual mind really takes the larger proportion of its knowledge of the outer world on trust, we come to the conclusion that whatever uniformity there may be in this region applies only to a very small fragment of the stream of thought which forms each person's individual possession.

But this individual possession is really the only knowledge which we have of any and everything, and in it every sensation or occurrence is for each of us equally real: it exists with the same right as any other, though, for reasons stated before, we do not call every one of its features equally real.

We are thus led to the inevitable conclusion that the notion of uniformity refers only to an extremely small fraction of our actual individual experience, and that we have no right to force this canon or rule of thought upon that much larger area of personal experience which contains our feelings, desires, volitions, memory pictures, creations of the imagination, and fancies of all kinds. Most of these show no regularity and uniformity, but a succession of changes, sudden and unexpected, making it almost impossible to retain, even for the shortest time,

any aspect of our inner life steadily before our inward eye. The reason why nevertheless this dogma of uniformity has become so popular is owing to two main causes.

Ever since science succeeded in establishing a few simple mathematical relations, governing large classes of physical phenomena, it progressed with such rapidity in many directions, that the idea of uniformity then started became overpowering. Not only have new facts been discovered through the assistance which mathematical reasoning has afforded to simple observation, but the earliest examples of uniformity—viz., Kepler's laws and the fall of bodies—were derived mathematically from the observation of the largest and most frequent external facts and events, namely, the motions in the physical heavens and on the surface of the earth. Thus these first steps in modern science seemed to embrace at once the whole of the physical world; and the method of their discovery became a model for all future research.

The other circumstance which helped to impress the canon of uniformity on the scientific and the popular mind is to be found in the comparative insignificance of the aggregate of all human minds and their labours within the confines of the physical world or of nature.

Looked at from the point of view of purely natural knowledge, that is, of things located in space, the human mind occupies an infinitesimally small situation, and as such seems to the naturalist to be quite overruled by the laws which obtain throughout the Cosmos, or on the surface of the earth, whether mechanical or biological.

But we have already shown that to locate the whole of the inner world in some physical organ is a gratuitous assumption. All that we are entitled to say is that, through our bodies, or through some special organ within them, a communication exists between what we term the outer and the inner worlds. These two worlds, of which the latter is by far the larger and more complicated, touch, as it were, in one point from which lines of infinite length can be traced separately in both worlds. It follows from this that we have no right to judge of the magnitude of either of these two regions by regarding it from a standpoint contained in the other. And in consequence of this necessary admission of our incapacity to judge the whole of existence from one point of view, the properties which are found to belong to either of these two infinities cannot be, except symbolically, transferred to the other. Each of these regions has its own nature, which must be studied—and can only successfully be studied—from a point of observation situated within its own area.

This rule for our guidance in natural as in spiritual phenomena, is not invalidated by the fact that a very small portion of our inner sensations is more intimately connected at once with the whole cluster of physical sensations on the one side, and with the larger region of purely subjective feelings and emotions on the other. This is no other than our physical body, but the very contraction of this point of communication tempts us continually to mingle in a methodical survey within either region, excursions into the other, from which we return with notions of a

foreign character which are inapplicable to the subject we are dealing with, and in consequence disturb the result we have arrived at.

A few examples will illustrate this.

IV.

Methodical investigation of the outer as of the inner world started very late in the history of human civilisation.

Also research at the present day is carried on by individual persons at an age when the common-sense view of the world has been fully established in their minds. Thus the primordial relation between the two worlds has in both cases long disappeared from view. Instead of dwelling on the fundamental fact that for every individual mind, what are termed outer and inner sensations are continually intermingled, we usually disregard this fact, and the two worlds are considered to be quite separate and opposed to each other.

No doubt practical reasons urge this later view forcibly upon us.

It is likely that in the history of mankind the closer study of any subject was prompted by practical needs and considerations, and to-day also, the progress of the pure sciences is extremely slow, if compared with those other sciences which are stimulated by practical requirements.

Thus Astronomy and Geometry probably had their origin in the practical needs of travel and navigation

in the one case, and of mensuration and architecture in the other.

The impossibility of arriving at exact data whilst retaining the comprehensive or synoptic view, makes it necessary to resort to the process of simplification. This is based on selection, analysis, and abstraction.

But though the process of abstraction or specialisation has long been recognised as the only fruitful one, it is extremely difficult to carry out in its purity.

It has long been seen that matter and motion constitute the fundamental principles in all physical occurrences, but the definition of these two terms has only been clearly and unambiguously given within the last few generations, and popular as well as philosophical writings, even within the last fifteen years, still labour not infrequently under a great confusion of thought.

Foremost natural philosophers like Galileo, Kepler, and Newton disengaged themselves to a great extent from the trammels which subjective experiences cast around the simple mathematically measurable data of motion and mass. Yet even Newton still retained the notion of force in stating his Laws of Motion. The term Force was meant no doubt originally to denote the effort which we have to put forth in creating motion, or the resistance that checks our voluntary or involuntary movements. It is still popularly considered to be something of quite a different order from the motion it produces or arrests. Only quite recently have the text-books of mechanics been thoroughly purged of this remnant of a purely internal principle. It is now seen to be sufficient to look for the

cause of any motion in other motions which have preceded it, and to calculate its quantity and direction from the quantity and direction of the preceding motions and the masses implicated. The term Force has been at once defined and supplanted by a definite quantitative relation of mass and velocity, and it has even been suggested that the word itself, which implies a spiritual agency, should be discarded from the vocabulary of mechanics.

Unfortunately, in effecting this clearance of ideas, a new term had to be introduced to denote the quantity of motion in any special case. This term, Energy, introduced another non-physical notion, taken from our mental experience, and this suggested the confusion of mental and physical energy. Whilst Herbert Spencer still laboured under a confused notion of Force in stating his well-known principle of the "Persistence of Force," Ostwald, on the other side, has been misled by the term Energy into treating psychical or mental energy in the same way as we deal with physical energy.

Another example of the transference of notions applicable only to mental phenomena is to be found in the expression, the Laws of Nature. We are told that the Laws of Nature cannot be broken, that they are inexorable. These expressions are taken from human life, individual and social.

The behaviour of individual persons as well as of a society of persons is something different from the command which should regulate the former, or the enactments of Law which should govern the latter. In both cases an Authority exists outside of the acting person or persons.

But such is not the case with the formulæ which we call the Laws of Nature. These are merely an expression of the behaviour of things natural. They do not exist anywhere in the outer world separately or apart from the things and occurrences themselves to which they refer. They may indeed be stated in the abstract as so many relations which are to be found uniformly between things or events, but their independent existence is merely one of thought, and in their complexity and totality they constitute one of the realities which the human mind projects as it were out of itself, mainly because they are recognised by all persons competent to understand them.

So far as they can be stated precisely they form a department of applied mathematics.

It is therefore more correct to speak of the uniformity of nature, or of the nature of things, than of the Laws of Nature.

It must also be noted that these so-called Laws of Nature, or more correctly speaking, these uniform relations or rules of the behaviour of things, are not really known.

Being abstractions which the human mind makes in observing and contemplating things and events, they come to our knowledge after the behaviour of things has been observed and studied, whereas the command of a personal authority, or the enactment of written laws, must be known before the behaviour of individuals or of societies can be regulated.

V.

Another important feature in the picture of the outer world presented to the developing mind of any individual person is the fact that space which contains everything belonging to the outer world, becomes gradually filled up.

This has, in the history of thought, a twofold significance. The popular and early conception of space as a void filled with discrete matter or phenomena has, to the scientific view, given way to the conception that space is a plenum, filled with an imperceptible something which has as much reality as the comparatively few things and events which are known to us directly through our sensations: this leads to the doctrine of the continuity of that substance which is supposed to fill space.

The effect of this view of the constitution of the outer world on the things and events of the inner world is still more important. Whereas the primordial aspect of the world of Thought or the firmament of consciousness is that of a continual change and alternation of physical or outer sensations, and of inner feelings and manifold experiences, the scientific view which is merely an extension and completion of the common-sense view has gradually crowded out the purely internal experiences, and left in the physical firmament no room for those things and events which are of personal interest to each one of us, but differ with different persons. The firmament of Consciousness has been replaced during by far the greater

portion of our waking moments by the firmament of outer space.

It has thus come about that the further we advance in our knowledge and study of the external world, the more difficult does it become to free ourselves sufficiently from external impressions to be able to realise the independent existence of an inner world. There seems also no doubt that even when we, to use a figurative expression, completely shut our eyes to things around us and retire into the depths of pure thought and meditation, the objects of our memory, imagination, or fancy, present themselves in spatial order and with spatial features.

It is not only external things, that is, aggregates of physical sensations, that return to us in memory with their spatial location and in their spatial environment; but even purely internal experiences, such as desires, volitions, and feelings, are usually, if not always and with all persons, accompanied by spatial attributes, when recalled by memory or pictured in imagination.

In the foregoing I have referred already to the visualising of numbers, and the fact that this is very variously exercised by different persons, shows that great individual differences between minds exist and are well worth careful study.

To take an individual case, the writer of this fragment finds it impossible to think, for instance, of any individual person of his acquaintance without seeing with the mind's eye this person in a definite situation with definite surroundings and in a definite position. And he finds the same to be the case, whenever he tries to fix in his thoughts definite abstract notions,

or indefinite and vague feelings. Can any one vividly experience love of those dearest to him without seeing, in his mind's eye, these loved persons more or less vividly before him? Is it possible to feel a distinct desire, or to frame a definite course of action, without filling the firmament of thought with definite things, persons, and events? The artist who conceives some great creation, cannot be satisfied or proceed to its execution before he has in his mind visualised and externalised his fancy. He must see his work before him ere he is able to put it on canvas, hew it in marble, or raise it as a monument in stone.

Even in the most ethereal of arts, surely the musical composer must hear the harmonies and melodies of his symphony or song before he can write it down or produce it on an instrument or through an orchestra. Thus space obtrudes itself everywhere, not only on our outer, but also on our inner view, and is directly, or collaterally, the all-embracing receptacle of the whole of our experience.

And yet we feel that though space and spatial features obtrude themselves everywhere, they do not give us that which is most important and interesting to us. This is only revealed through a comprehensive glance which gathers up all the single features and all the many instances which form the substance of manifold and often-repeated experiences into a collective view which in some indescribable manner conveys to us something deeper and more responsive than any or all the single features added together. It is again an instance of the synoptic as contrasted with the purely synthetic aspect of thought. In this way,

for instance, the minute study of any work of art may, all of a sudden, brighten into a real understanding of it, and admiration rise to rapture and enthusiasm; so also the acquaintance with a fellow-being may after frequent intercourse ripen into friendship, and the pleasure of repeated meeting and conversation burst into love. We feel instinctively that the refined and spiritual experiences do not belong to objects or persons in their purely spatial existence, but form a world for themselves in the same way as in the purely intellectual region numbers, mathematical formulæ, and logical conceptions, form realities by themselves.

VI.

The fact that the world of science is supposed to exhibit a continuum both in time and space, and that it can be subjected to methodical treatment and mathematical calculation only so far as this continuity can be traced, struck natural philosophers long before all physical agencies had been reduced to modes of motion, and before it became possible to imagine cosmical, molar, molecular, atomic, and corpuscular motions simply as gradations which merge into each other and are qualitatively of the same order.

The idea of continuity of matter and motion has found expression in two well-known phrases mentioned already in an earlier chapter. *Natura non facit saltum* and the *Horror vacui* express the conviction of continuous development in time and continuity of motion in space on the one side and of the impossibility of a void

on the other. This indicates that there are two forms of continuity, which we may in common parlance describe as the absence of breaks in time and of gaps in space.

It is well, however, to note that both kinds of continuity exist only in the ideally constructed universe of Thought, not in those small portions of the world which any one of us personally observes or knows, and which is for him the only existence. This ideal world has been created in any individual mind by two distinct processes: first and foremost, by adding to his individual experience the experience communicated by others; and secondly, by discarding for a time at least all purely personal experiences, be they sensations or feelings, which would interfere with this ideal picture and disturb its uniformity. In doing so the mind has not only to get rid of all purely subjective features which it experiences alone, but also of those physical sensations which it has more or less in common with other minds. Thus colour, sound, light, and heat, and all the various sensations of touch and resistance, have been discarded in order to be replaced by motions, vibrations, and tremors of some perceptible or it may be imperceptible substance.

As stated above, the purely scientific or exact treatment of natural phenomena is fully possible only where these conditions exist. Kant laid it down that real scientific knowledge existed only so far as mathematics went.

This dictum is borne out by the fact that even in the physical world, within the continuity of time and space, there still exist regions which are inaccessible to exact

treatment; border lines which break up the desired continuity. Such are, for instance, the line that divides the inorganic from the organic world, and within the latter the line that divides the animated from the inanimate creation. And still more flagrant are the enormous changes in historical evolution which are brought about by the sudden appearance of great personalities. These breaks in continuity which baffle the attempt to subject the phenomena of life and of mind to the sort of exact analysis that has been successfully applied to phenomena of the purely physical world, have suggested to many natural philosophers the existence of some indescribable agency which cannot be subjected to exact definition or measurement. But on the other side, the fact that these breaks occur only in an infinitesimally minute corner of the physical world, has induced others to look upon them as negligible quantities in the vast and comprehensive order of things: mere freaks or sports in an orderly universe.

It is hardly necessary to indicate that from the point of view occupied in our present discussion, this subject of continuity assumes quite a different, almost an opposite character.

For us the great universe of space, with all its multifarious phenomena, has arisen in the human mind by a progressive and increasingly severe selection of certain sensations within the stream of thought. These sensations are embedded for every individual mind within the vast field of consciousness, like islands in an ocean, or stars in the firmament. They originally lack all continuity, they are scattered about in an

irregular manner, rising and sinking within a boundless background with equal suddenness, and presenting the very opposite of continuous location or change. In fact the properties of continuity belong only to a selected and abstract cluster of sensations, artificially put together by the co-operation of many minds, and by methods of extreme ingenuity and refinement. To look upon this mechanical texture which is enwoven in the aspect of existence as it presents itself to any individual mind, as the only real thing, would be just as if a biologist in viewing the human frame should propose to limit its reality to the skeleton which can be mechanically explained and construed, leaving out of consideration the surrounding drapery formed by flesh and blood, nerves and tissue, upon which life entirely depends, and which converts the ghastly appearance of a skeleton or a skull into an object of supreme beauty. Thus we must conclude that the mechanical continuum hidden in the physical world, and discovered by refined scientific analysis, is as little the essence of things real, as the skeleton is the essence of a living creature.

VII.

Having then discarded continuity, whether as absence of break or of gap, as inapplicable in a description of the inner world—that is, of that totality of experience which forms our primary and ultimate knowledge—we now come to a further property which

the scientific exploration of the outer world has above all forced upon natural philosophers.

In the course of the last hundred years a term has been introduced into the physical description of external phenomena, which has allowed many, if not all of them, to be reduced to a common denominator. This is the term Energy. It has taken the place, in text-books, of the ambiguous term Force, which was used in at least two different meanings, sometimes denoting merely the unknown cause of movement, and again identified with power to do work.

The quantity called Energy is supposed to consist of two factors, defined as the Intensity Factor and the Capacity Factor; and the difference of phenomena depends not only on the amount of energy, but also on the relative proportion of the two factors. The clear definition in mathematical language of these quantities and their combination marks out a large field for calculation, wherein the statement of the changes in the quantity and the composition of energy leads to remarkable results, to a control of the various forms in which energy presents itself, and the transformation of one form into another.

Long before the introduction and definition of this new term had placed the exact sciences on a sure footing, it had been noted that the two fundamental quantities, namely, Mass and Motion, were indestructible.

Notably the development of the science of Chemistry has depended upon the axiom that Mass is an indestructible quantity; and this principle became of eminent practical use when Mass was identified with

weight and measured with the balance. The correct valuation of Motion came later, through the introduction of the term Energy.

Thus the principle of the Conservation of Energy became the fundamental notion in Mechanics, Physics, and Chemistry.

It must, however, be noted that this principle has only been verified in finite regions of physical phenomena, and that the extension of the principle of Conservation of Energy to the universe as a whole remains a pure assumption, which is of no practical value. Since, however, all practical applications move only in limited and restricted areas, the assertion of the principle for finite quantities is amply sufficient, and has proved to be an invaluable regulative canon of research.

CHAPTER XI.

OF VALUE.

I.

THE attempt has been made to extend the principle of the conservation of energy to mental phenomena. This attempt has, however, signally failed for various reasons, of which the following are the most obvious.

First, Energy if applied to mental phenomena denotes something unique and incomparable with Energy in the physical world. The latter is defined in the measurable quantities of time, space, and mass; but space and mass do not apply to mental energy, and to treat the two quantities as of the same order is inadmissible. Further, no method exists for measuring mental energy except when and where it results in physical motion. This can, of course, be co-ordinated with other motions, as the three factors just stated are always involved. But a great deal of mental energy is spent in experiences or achievements which make no outer show, but are nevertheless important features in the stream of thought and feeling.

The most striking difference between physical and mental energy lies just in that property of the former

which is its most characteristic feature, but which is entirely absent in the sphere of mental energy.

It has been pointed out by Lotze and emphasised forcibly by Wundt that the characteristic of mental energy is its continued increase. This principle of the continual growth of mental energy does not seem to have been sufficiently noted by philosophers. The reason of this may be that there is no generally accepted method of measuring mental energy. It suffices, however, to take a broad view of the mental or inner life of man and mankind to recognise that its growth and development is truly the only thing in the world in which we are interested, and which distinguishes the life of the human species from that of all other things, be they inanimate or animated. The outward signs of this increase are everywhere where civilised society exists. The great architectural structures to be found in ancient and modern countries, the collections of books, the galleries of painting and sculpture, the academies of learning, the houses of worship, the songs of the people, and the sublime creations of musical composers, testify to the existence of a world which is quite distinct from the actual amount of material or physical energy which has been used and expended in its creation.

How infinitely small is the amount of marble contained in a Venus of Milo compared with the value we attach to this work of art: how small also the physical labours of the artist compared with the sublime intuition which guided his hand! how negligible the amount of pigment and canvas and of the labour bestowed on both if we compare it with the world of

thought revealed in a Madonna di san Sisto! how little value and substance is to be found in the score of one of the divine creations of a Palestrina, a Bach, or a Beethoven! And yet this small amount of matter and physical energy has permitted the artist to perpetuate for all time the creations of his imagination, revealing a truth higher than that contained in the merely practical skill which was at his command.

II.

Summing up what has been said in the last two sections, we may say that the principal characteristic features of the outer world, as presented in the scientific aspect, are absent in the world of consciousness or the inner world. Instead of continuity, we find there its opposite, namely, discontinuity, and instead of the conservation of energy, we find there the continual growth of a principle or a something which is very misleadingly designated by the same word.

We may now try to find a term which comprises both the attributes, indicating at once the increase and the suddenness and incalculability of this increase in the stream of thought or the firmament of the soul.

This word is Creation.

Applying this term Creation to the two worlds, that is, to the outer as well as the inner, to that small portion of sensation which we can measure and calculate, as well as to the whole surrounding region of other and of all mental experience, we may say that the outer world can be looked upon as *created* once for all,

whereas for the totality of the inner world, we must maintain that it is continually *being created.* The counterpart of this statement is the popular view that the external world, or the cosmos, is eternal and indestructible; whereas the inner world, as it has grown in the course of the life of humanity, and in every individual instance, might also disappear without, as it seems, altering the fixed course of events in the physical universe.

We are obliged to use terms which have been invented under the predominating influence of external conditions and necessities in order to commune with our fellow-men, not only with regard to outer things, events, changes, but also when we describe the inner world of thought, sensation, and feeling. In doing so, we involuntarily import into our hidden meaning also some of the characteristics which attach only to the outer world. Thus the symbolical use of words is continually accompanied by the danger of carrying over attributes which are not really applicable to the things we are dealing with.

A singular transfer of the opposite kind is witnessed in the use of the two words mentioned in the foregoing: Force and Energy. Originally coined to denote purely subjective experiences, such as the effort we put forward in voluntary action, or the power latent in our inner selves, these two terms were in the development of science transferred to purely physical facts and events. There they misled students of nature into serious errors.

Force was used to denote an occult agency behind or beneath visible phenomena.

And Energy, or, in the older expression, *vis viva*, or living force, no doubt suggested a hidden principle such as, under the designation of vital force, condemned biologists to follow alluring bye-paths into barren fields of research. Science has, within the last hundred years, efficiently cleaned out this Augean stable, and confined the terms, by a reference to visible and measurable quantities, to the actual world of physical phenomena.

The damage done in former centuries by applying purely mental attributes to the description of the physical world has been, in recent times, more than balanced in the opposite direction; for naturalists, on their part, have attempted to clarify the science of the mind by reimporting into this study the terms originally borrowed, but now stripped of the emotional colouring through which alone they were fitted to describe some primary experience of the reflecting and introspective soul.

The statements about continuity and the conservation of energy in the outer world which were made above in discussing physical science, require to be taken with caution when considered from a philosophical point of view.

Both notions are what we may call limiting ideas or abstractions. *Prima facie*, their applicability is not evident even in the physical universe, where the common-sense view is continually confronted both with discontinuities and with apparent losses and gains. It is only in an ideal reconstruction of the physical world, such as science aims at, that these two canons of thought have established themselves after thousands of years of

research as regulative principles which the student of nature must always keep before him. It is, for instance, quite evident that to a common-sense view the physical world itself presents endless breaks and chasms. This leads to an aspect which is the main foundation of a special description of nature which deals with just those irregularities that science discards in principle. This aspect is that presented to the artist.

We shall revert to this point of view in the sequel.

Even the student of pure science has always to turn again from his rigid calculation and measurement to the broad view of actual life; he has to take in at a glance the world as it is before he dissects it; he has to recognise that no analysis and subsequent synthesis exhausts the nature of any visible or tangible thing, that the *ensemble* is more than the sum of its parts.

For its real progress science is ultimately always indebted to observation: though the astronomer may turn his back on the starry firmament in order to carry out his refined calculations in his study, he must always revert to observation in order to verify them. Though colours and melodies figure in the mathematician's language as measurable tremors or vibrations, the most delicate colour-tests are used in chemical research, and the tuning-fork in the science of acoustics. Without the Solar Spectrum and the discontinuity of the Lines of Fraunhofer, Spectral Analysis would be unthinkable and physical astronomy could not claim that important part in the exploration of the heavens which it now does. It was in the course of extensive travel over different regions that Darwin and Wallace were led to those speculations

which have transformed Biology. On the other side, it is true that only through precise definition, measurement, and calculation, can the most brilliant observations be put into a form in which they become of practical use. Of this, the most splendid example is to be found in Clerk Maxwell's achievement of putting Faraday's inspirations into mathematical language, thus revolutionising the whole science of applied electricity.

III.

Reverting now to the exploration of the inner world, we have no need to dwell at any length on the breaks and chasms which it presents in the course of its continuous flow. Not only do we, in the hours of our waking life, become painfully aware of states of our consciousness which are little more than empty regions of thought out of which we can recall nothing definite or valuable. The absolute lapse of consciousness during sleep might well lead us to doubt as to our own identity, were it not for the continuity of external experiences, which we recognise through memory, and of which we originally became aware only through the assistance of others who helped us in the earliest days of our earthly existence.

As to continuity in our mental life, we know well how difficult it is to attend steadfastly to any given line of thought, or even of observation through the senses, without being continually disturbed by intruding ideas or sensations; further, how a prolonged attention to anything becomes monotonous and

fatiguing, leading to mental exhaustion and the loss of mental activity.

In fact, it is only by continuous changes and surprises that we are kept awake and alive. The facility with which we realise these surprises and enjoy them, marks the degree of mental vitality, which is probably at its highest point in infant life, whilst on the other hand it decreases and dies away into indifference in old age.

These features of mental life are well known, but an application of the doctrine of the growth of mental energy may here be pointed out which has not been sufficiently noted, as it seems to me, in current psychology.

This idea may be expressed by saying that where creation is there is freedom.

And the result of this way of stating an undeniable fact points to an aspect from which the problem of free will appears in a new light.

As just stated, the implications of the doctrine of the growth of mental energy are many, and have not yet been followed out in detail. Nor is it likely that we are at present in a position to follow them out in any completeness.

If we consider that the implications of Descartes' original and leading idea have occupied thinkers ever since, each one of his nearer or remoter followers, such as Locke, Leibniz, Berkeley, and Hume, having taken a step forward without exhausting the outflow from the original source, it will not seem likely that we shall at once be able to draw all the inferences suggested by the fruitful ideas referred to.

The speculations which we are engaged in, and which have occupied thinkers notably of the British School, whom we must count as our predecessors and masters, are not of a nature to permit of a closed system of thought. They form rather a succession in which each member is a torch-bearer, carrying a little further what his forerunner has done, and leaving much to be done by followers. The principle of such a succession is different from that which underlies the great idealistic or realistic systems of the Continent, to which we must add that of Herbert Spencer in this country. Each of these systems is self-contained and complete in design, though perhaps not in execution.

Compared with the more or less exclusive character of these celebrated systems, the progress on the lines of thought which we are now following resembles much more that of the natural sciences, which grow by the addition of knowledge, and in which every honest labourer has some chance of adding his contribution, however small it may be. The history of these sciences warns us against premature generalisation: in it the accumulation of fragments of knowledge stands out very clearly from the many attempts to establish all-comprising principles and comprehensive systems. The latter, however brilliant and imposing for a time, fade away in the progress of the ages, whereas the former are stored up for the benefit of coming thinkers.

Thus the discoveries of Newton in the region of physical astronomy and of optics form corner-stones in the edifice of time; whilst the attempts made by Boscovich and Laplace to elaborate a "system of the world" embracing both the cosmical and the minutest

molecular phenomena have lost their value, and Newton's emanation theory of light has been superseded by other theories which may, in their turn, likewise have to be discarded. The theorems of Helmholtz on vortex motion hold their place in mathematical physics, though the ingenious attempt to develop a general theory of vortex motions was discarded by its own illustrious inventor as not likely to lead to fruitful results. The discoveries of Darwin and Wallace in the region of natural selection will stand for all time, though the attempt to construct a world-theory out of Darwinism and Evolution has fallen to the ground.

IV.

In order to make a beginning in the exploration of the inner world in its completeness as containing also all those sensations and experiences which, under the name of the outer world, we select from the totality of experience, we may take the principle of the growth of mental energy as a foremost and striking feature.

But to avoid the confusion of ideas which may arise out of the use of the term energy, it will be well to repeat what has been said above, that this word, as now used in scientific literature, denotes something quite different from what we term energy as applied to inner states of mind.

In physical science, energy means a definite thing which can be measured, transformed, lost and gained by well-known processes. Though it cannot be seen as such, it can be perceived by a special sense which we possess—the sense of muscular resistance, or effort;

and in this form the personal energy we put forward is a portion of the total stock of energy contained in the outer world, and has been measured by well-known methods.

But energy in the wider sense, as originally introduced to denote a mental quality, is something quite different, and lies, as it were, behind the various events of our inner life. These events may be connected with very different degrees of mental energy, and may yet be all very prominent and absorbing—so much so that we may even fancy that they come and go without the help of any effort on our part; we may experience sensations which are so overwhelming that we in popular parlance say that they absolutely overcome or annihilate any conscious action on our part. This is indeed a doubtful point, and it may be argued that even where all action on our part seems repressed, there still exists the mental attitude of attention. And that this requires an effort is well known to every one who recollects the difficulty he experienced in childhood in giving attention to his lessons or to the word of his instructor. But even where such effort is not required, as, *e.g.*, when listening to an impressive musical composition or watching an absorbing stage performance, we are bound to admit that those purely contemplative moments of our inner life form a very large and important feature in the stream of thought.

We shall therefore discard the use of the term Energy as a definition of the whole of that world which we experience inwardly and which is always increasing.

Other attempts have been made in recent philosophical literature to describe and define this growth of the

firmament of consciousness. I will only mention one of these. Alfred Fouillée has put forward his doctrine of the 'Idées-Forces,' which maintains that ideas springing up in our mind act as forces generating new trains of thought, thus enriching our inner life.

Instead of adopting any of these valuable and suggestive terms, it will be simpler and more useful if we start from the undisputed fact that in the history of individual life, and still more, in that of the collective life of humanity, an enormous increase of purely mental interest is observable.

And here we must at once remark that this increase which is so striking is a collective achievement of the human race, compared with which the progress in any individual lifetime is, on the average, exceedingly small. Only in very rare instances, which we designate by the term genius, is an individual lifetime marked by a conspicuous advance on the lines of thought or by the creation of some supreme work of art. And even these brilliant exceptions owe the fruition of their original ideas to many outside influences both of persons and environment. Nor can we estimate the loss of many a brilliant achievement through the want of these fortunate surrounding conditions. The need of this combination proves once again that the true life of the mind is not that of an individual but a result and product of intersubjective communion.

Physically, individuals grow and decay, but their mental achievements, if of any importance, do not decay or disappear, but are added to a general stock or fund which constitutes the unique possession and the highest characteristic of the human species.

It will now be our task to trace, if possible, some of the steps through which this great possession of humanity has grown during historic times.

In doing so we have to go outside of purely individual development, but we may be able to trace a parallelism between the growth of an individual mind and that of civilised society at large.

CHAPTER XII.

OF ARRANGEMENT AND ORDER.

I.

It will hardly be doubted that the first mental instruction which a child receives is to observe definite things, which in the shape of toys or other articles are brought to his view by repeated movements, so as to attract his attention. This period of mere play is succeeded by other forms of instruction, among which the acquisition of speech is one of the most important, definite articles of use or play being named. Later on, a further important step is taken by putting things into special arrangements, thus introducing into the child's mind the idea of order.

Compared with the aspect which the surrounding world presents to the infant view, the new world of order and arrangement must be called artificial. But order and regularity between things and events is one of the first steps through which the human mind achieves its knowledge and mastery of these things and events. The principles underlying order and regularity in the artificial world are distinguished from the order of nature by repetition.

Though we speak of the Order of Nature, such order

does not really postulate either regularity or uniformity. But repetition, regularity, and uniformity, in arrangement and sequence, that is, in space and time, are certainly one of the first conditions of awakening and developing human intelligence. Nor is it difficult to find at least one reason why such is the case. Repetition and regularity are the most powerful aids to memory.

An event which occurs only once, or an arrangement which presents no rule or order, has little chance of impressing the mind and being retained by memory, unless it is of exceptional vividness, so as to command serious or even exclusive attention.

Considering the important part which order and regularity play in human affairs, in science, practical knowledge, art, and society, it is remarkable that only in quite recent times has attention been given by leading thinkers to the science of order and to its origin in the human mind.

A second important result of putting things into order is this: it enables the mind to take in at a glance a large number of things, features, or events; that is, it facilitates the synoptic view, enabling the mind to retain a knowledge of many impressions which otherwise would be lost in a vague or confused image continued by memory.

The very first step which is taken in awakening the child's attention, the presenting of small and definite objects, leads to a concentration of the field of vision, facilitating the synoptic aspect, not of the whole of the surrounding world, but of parts of it which are easily grasped.

We must not, however, forget that neither the detachment of definite things and events from their surroundings or succession in time, nor the putting of them into definite order, alters the natural appearance of the outer world, though it replaces it by a more or less artificial order. For practical purposes, we must always, in the end, come back again to the actual appearance of things and events and view them in their natural connections. By doing so, after the analytic process, we enlarge the field of mental vision, and the grasp or synoptic aspect of it.

Another peculiarity of orderly or regular arrangements is this: that they are liable to become of diminishing value, that their usefulness may become exhausted, and that they must give way to other arrangements, suggested by a renewed glance at actual existence which invariably leads to new combinations and arrangements previously unrecognised. A few examples will illustrate this.

The ancient doctrine of the four elements in Nature is now scientifically and practically of little use. Fire, water, air, and earth do not for us "form and build" the world, though they may still linger in the popular mind and in that of the poet as a tradition. The Ptolemaic system of the world had to give way to the Copernican after it had led astronomers into the labyrinth of cycles and epicycles out of which no fruitful way could be found; but it nevertheless continued in our daily habit of speech; we still speak of the rising and setting of the sun, moon, and stars. In more recent times, the desire to find the natural order of living things, in distinction from the Linnean System,

which was called artificial, occupied botanists for a whole century, when the doctrine of Descent suddenly altered the whole aspect of the living creation. In Chemistry, the Binary Theory of Chemical Composition was long in use, but after it had been replaced by the theory of Radicals or that of Types, the doctrine of Valency created a complete revolution in chemical science. Electricians of the school of Weber in Germany were seduced into what turned out a barren field of research by trying to explain electrical phenomena by assimilating electrical attraction and repulsion to the phenomena of gravitation, whilst Faraday's notion of the electric field opened out quite new vistas. And yet the older corpuscular theory of electricity has been revived for the study of electrolytic phenomena. The division of Chemistry into Organic and Inorganic has now lost its meaning, since the whole elaborate structure of so-called organic chemistry can be understood without any knowledge or reference to living, that is, organised beings; the chemical properties of which, forming the original task of organic chemistry, are now relegated to a special science, called Biochemistry.

Coming nearer home, that is, into the domain of mental science, we find a succession of attempts to put mental phenomena into some intelligible order so as to promote a survey of the human mind. Of these, the old faculty-theory and the later association-psychology are schemes which enable the philosopher to comprehend and grasp, to some extent, the great diversity of mental phenomena. They are both, at the present day, somewhat discredited.

But the most brilliant example of the Science of

Order is to be found in Modern Geometry, which under the name of Projective Geometry, Synthetic Geometry, or Geometry of Position, has revolutionised the science to such an extent that it has been called the royal road to geometrical knowledge. A wonderful simplification of algebraical formularism has also been achieved in recent times by the artifice of mathematical tactics, known under the name of Determinants.

II.

The illustrations given in the last paragraph of the arranging and ordering, endeavour and achievement, of Science may suffice to show the importance of order in the progress of human knowledge; but they also show how little any such systematic attempt has been able to rise to the position of an expression of the Universal order of Nature. Still less has that underlying design been made clear which we are continually prompted to seek in the inner life of the individual or the collective human mind. And yet, without the belief in such a design both in nature and in mind, no scientific research, no mental philosophy, no art, and no moral progress would be possible.

In fact, we are driven to the conclusion that order or arrangement is a separate and definite property of the World of Things, both physical and mental; so that we may add to the conventional classification of the properties of things—viz., into quantity and quality—a third property, which is position and order. This latter property belongs only to complexes and

aggregates, and reveals itself only to the synoptic view, or the *vue d'ensemble*. It is, in fact, as already said, one of the principal aids towards the synoptic aspect—*i.e.*, to seeing things together.

The importance of "grasp," that is, of seeing things together, is seen not only in the acquisition and increase of knowledge, but even more in the affairs of practical life. Here, also, we may distinguish two principal activities of the mind which rarely coexist, but on the alternation and mutual influence of which progress depends. Thus in all practical business we have the two extremes of expert knowledge with professional skill on the one side and of organising ability on the other.

No one who has spent any great time of his life in the pursuit of practical and public work will fail to recognise how necessary these two different and frequently opposed aspects are for the progress and success of large as well as of smaller enterprises.

Innumerable instances could be given, not only in the scholarly pursuit of knowledge, but likewise in the application to practical ends, of the failure as well as the success of these two directions of thought according as they work independently and inharmoniously or assist each other. Yet persons specially gifted with either of these two endowments—that of the expert and that of the organiser—very frequently fail to understand how indispensable to success is the activity of him who labours on the other side.

Experts with a knowledge of detail in some special field, or with skill in some special profession, frequently overlook and under-value the labour of those who

collect, arrange, and organise. And on the other hand, those who can grasp any large subject, who command an extensive view and combine a great variety of interests, not infrequently look with compassion, or even contempt, upon the patient labourer who, in the secluded study or workshop, spends his time in investigating, discovering, or inventing some seemingly insignificant fact or artifice.

Thus hundreds of valuable suggestions or contrivances pass unnoticed, and the searcher or inventor is disheartened because he has not found the organising mind which can place his discovery or invention in the right position in a body of knowledge, or in a scheme of practical work. But equally the organising master-minds are unable to do their best if they rely too much on expert knowledge or skill which has become antiquated, and neglect to look out on all sides for new helpers.

CHAPTER XIII.

OF DIRECTION, DESIGN, AND PURPOSE.

I.

If we realise how great is the importance of regularity, arrangement, and order in the theoretical and practical pursuits of the human mind, we shall come to the conclusion that these various terms point to a principle of thought and action which is quite different from what we may call the material with which either thought or action deals. We recognise the increasing importance of this principle as we ascend from the lower realities of sensual experience into the higher region which contains our Emotions, Desires, Fancies, Imaginations, and Ideals.

It will be of some interest to take note of the different terms and conceptions in and through which we define in language these different forms of Order. Such a survey cannot in the present instance be more than tentative and incomplete, as there seems to exist no systematic attempt to deal exhaustively with the problem.

If we begin with the simplest phenomena or complexes of Sensations with which we are acquainted—viz., the arrangement of things in Space and Time—we

recognise order in two forms—viz., Order as a fixed arrangement, and Order in change or motion. The principle of the first seems to reduce itself to repetition, regularity, imitation or sameness of position, by whatever term we may prefer to express this simplest form of order, which is the form that children are first made acquainted with in play or in lessons.

A second form of Order meets us when we come to change or motion, and here the new concept of Direction comes in. So long as we do not go beyond these simple relations of position in space and time and of motion, we seem to have the phenomena of the outer world completely under our control so far as the understanding of them is concerned; and a great many practical applications are entirely dependent on this understanding.

If we are willing to take a purely mechanical view of the actual world and reduce all phenomena to modes of motion, whether cosmical, molar, molecular, atomic, or corpuscular, we seem to possess a complete grasp of the outer world; for in this case we have the mechanical principles of the conservation of Mass, the conservation of Energy, and the conservation of Momentum—the latter principle being expressed in one of the laws of motion: that every body if left to itself and not influenced by any external force will continue to move in a straight line with undiminished velocity. In this rule there is contained a difficulty—viz., the difficulty of the definition of a straight line. But as we have, for all practical purposes, arrived at the means of measuring Mass, Time, and Direction, there seems no hindrance in our way to completely

grasping, that is, imaging to ourselves, the mechanical framework of the universe. This is shown conclusively in astronomy, which has proved its command of the cosmical phenomena of motion by prediction of things distant in Space and Time to a degree which marks one of the greatest triumphs of the human intellect, and is to the popular mind one of the marvels and the very ideal of scientific knowledge.

If we advance a step further in our view of natural phenomena, taking in not only the data of Time, Space, and Mass just mentioned, but in addition the physical qualities, such as Colour, Sound, and Temperature, we tread upon more uncertain and conjectural ground in our endeavour to construe to ourselves natural phenomena. For here we lose hold of the first law of Motion just mentioned, that is, of the directing principle in actual occurrences: we are reduced to the two principles of the conservation of Mass and of Energy. In all cases where such Energy disappears in the form of Motion (becoming what is called potential instead of kinetic Energy), its reappearance may take place in directions which cannot with any accuracy be foretold.

The principles of the conservation of Mass and Energy are not violated. They serve the purpose of verifying the correctness of our observations in the same way as the operations of a book-keeper serve to control the transactions in a complicated business, though the book-keeper's accounts do not disclose the nature of those transactions.

This is especially evident in chemical changes of decomposition or composition. The purely mechanical view of Nature must therefore, according to some

thinkers, be abandoned; according to others it must be supposed that Energy never disappears as kinetic, that is to say, as a mode of Motion, but that its motions are so immeasurably small in dimensions and so large in number as to elude our observation.

Still more than in physical and chemical phenomena does the guiding principle seem to be hidden from us in the phenomena of Life; and this explains why, for a very long time, the biological sciences were limited to mere classification as the only means of affording that grasp of complex phenomena which the human mind is always striving after.

It was, however, always felt that these systems of classification followed an arbitrary rule, affording little insight into the real nature and history of living things, being based on mere external similarities, that is, on the repetition of forms and processes.

A great step in advance was taken when living things were studied in their individual growth, and when it was recognised that the stages passed through in embryonic development corresponded to a large extent with the succession of species in the animated world. The recognition of this remarkable fact, which is expressed in the formula of the parallelism of Onto-genesis and Phylo-genesis, led naturalists to the modern doctrine of Evolution.

The old-fashioned arrangement of a museum, in which natural things were classed according to superficial similarities, was replaced by the genealogical tree showing the descent of the complicated or higher creation from lower and simpler forms.

It was at the same time realised that complication of

structure went hand in hand with complication of function, giving much greater variety to life and behaviour; and, as this increased the philosophical interest with which the human mind contemplates natural things and events, it was inevitable that the idea of design should enter the field of scientific thought, thus bringing the living creation nearer to that point of view which treats Nature as following a definite plan in the same way as man himself creates an artificial world of tools and mechanisms in order to achieve definite purposes.

II.

We have already noted in a former chapter that Images or Ideas in the human mind exert a definite control over the primordial but involuntary mobility and restlessness of the human being. They act as a directing force. Among them the physical sensations, such as hunger, thirst, and others, are the earliest, and remain fundamental in spite of their relegation to a lower sphere as the workings of the emotions and the intellect gain more or less superiority in the course of life. In fact they become, or should become, more and more automatic, whereas the Images and Ideas of the intellect gain in that attractive force which we call interest, and, being once established, acquire an influence over our movements through which we become active and creative in the world of Values.

Events in this world originating in individual and collective interests prompt us to look for Design, Meaning, and Purpose not only in the narrow sphere of

human activity, but also in the larger region of the physical world which surrounds us.

As the experience of subjective exertion, effort, and force makes us search for something corresponding in Nature, and leads to the conception of physical forces and causes, so the existence of Meaning, Aim, and Purpose in human actions makes us look for something corresponding in external events.

This tendency to introduce into the consideration of the physical Universe the idea of Design and Purpose is just as indestructible and ineradicable in human thought as is the search for hidden forces and causes. *Prima facie*, therefore, what is called the teleological view of events around and in us, is just as natural as the mechanical aspect, and in the natural history of the animated world, just as indispensable.

The fact that for scientific purposes the formula of Causation is preferred to the formula of Aim and End has a purely subjective origin, inasmuch as Definition and Measurement on the largest scale, and increasingly also in smaller dimensions, tend to remove that uncertainty and absence of clear definition which attaches to the higher conceptions of Meaning and Purpose.

These latter also, being less definable, vary greatly in different persons and with each at different times. They are therefore not easily communicated to others, and rarely acquire that cumulative strength and impressiveness which attaches to most of the active forces and causes in the outer world, that is, in the region of our physical sensations. At times, indeed, both in the life of the individual and still more in that of the mass of human beings, they rise to great distinctness, acquire

cumulative force and such invincible power, that they, as it were, put to nought all physical resistance and overcome the inertia which is a property of all masses, creating revolutions and upheavals which change the whole aspect of social and political life.

Thus Napoleon said correctly that there are two forces in the world—the sword and ideas: in the long-run ideas always win the day.

III.

According to the point of view taken up in these our discussions, we look upon all these abstract terms and relations, through which we bring Rule and Order into the primordial chaos of our Sensations, Emotions, and Desires, as entirely subjective; as acquiring objectivity mainly through their permanence, and through the fact that in some unexplained way we learn that other persons share with us the same or similar experiences.

They are selections which the human mind is impelled to make among the crowd of physical and other sensations which fill the changing firmament of consciousness. The selection is merely a further step for every individual mind in that process of clearance which begins in infant life, starting with the recognition of detached and repeated physical sensations, and advances to their connections in time and space.

We have no true knowledge of these abstractions other than that which exists for every one of us in his own individual experience. And so far as knowledge gained from or through other persons is concerned, we

cannot really say that we possess it unless it corresponds to some experience of our own which is definitely marked and to which we can refer it.

The use of words and terms which do not refer to some personal experience in each of us is no better than the repetition of such words by a parrot, or that of a proposition in Euclid by a schoolboy who does not understand it.

Nevertheless we continually use words and terms of which we have only a confused image in our mind, and a very large number of successful operations in practical life are carried on with the help of words and terms which the user only dimly apprehends. In such cases the operation he performs is no better and perhaps less perfect than that of a tool or a calculating machine. But the fact that this is so, and that operations based upon purely intellectual trains of thought can to an apparently unlimited extent be made mechanical, is one of the greatest achievements of the human mind, and that by which the complicated structures of civilised society have been founded and extended.

But it is well to remark that originally they started from the creative or imaginative effort of some individual mind.

Such individual minds possess the power of discovering in the elaborate texture of their experiences some lines of an inwoven cypher; in the labyrinth of their thoughts they find a thread which guides them safely to a comprehensive outlook: they are able in language, symbol, or model to show this to their fellowmen. The manner in which they do this shows the

greatest variety, but the way in which they discover these guiding lines of thought is a mystery, not only to those who receive and use them, but probably also to those who discover and invent them.

Examples of this mysterious process of abstraction, imagination, and synoptic comprehension may be found in the description which Mozart gives of his art of musical composition, or in Kekulé's description of his discovery of the ring of atomic arrangements which, under the name of the Benzol-ring, forms a nucleus in the history and science of organic chemistry.

The real object and purpose of all these simple or elaborate geometrical, logical, or artistic figures and models, is the understanding and command of the whole world as it presents itself to each one of us in the waking hours of his life. The first impulse to it is probably curiosity, which the child of to-day shares with the savage of remote times.

This curiosity or thirst for knowledge is in the earliest stages of civilisation soon directed to and absorbed in the gratification of physical needs, and it is only in more advanced stages that the acquisition of knowledge as such, and the satisfaction of the purely intellectual and artistic interests, fill the life of the years of childhood and adolescence, when the continual reference to practical need is or should be, to a large extent, kept in the background.

Through fortunate circumstances, and in the favoured surroundings of the *sapientum templa serena*, which are one of the latest creations of advanced civilisation, the notion has arisen and is fostered that knowledge

has a value for its own sake, that the search after truth is sufficient in itself, and that art is to be cultivated for art's sake. This seems an exaggerated way of expressing a correct idea.

So far as the search for truth and truth alone is concerned, the history of the sciences has sufficiently shown that the advance of thought and knowledge does not lead to the discovery of ultimate truths, but has value only if it leads to the discovery of new facts, that is, to a better grasp of complicated phenomena, or —to express it in the language of this dissertation— to the revelation within the range of our daily experience of data and features which the bluntness of our untutored senses had hidden from us.

It is a process similar to that of the astronomer who, with his telescope and spectroscope, dissolves the nebula into a crowd of distinct objects with definite physical properties. Such a process of dissection reveals to us things and agencies which we may eventually synthesise and use in our own way, creating a new and artificial world in which we put the hidden forces of Nature to manifold uses and purposes. But this process is endless, and though it took thousands of years before a systematic and vigorous start was made in scientific research, the progress is now so rapid that few, if any, scientific formulæ can be considered to reveal—as was once supposed—the real laws of Nature. The latter, if they exist at all in that primitive fashion which was proclaimed not long ago, are certainly hidden from us and will always remain so.

Reverting to the definition of truth which we

reached before, that it means consistency and harmony among our thoughts and ideas, we may say that the impelling force which prompts the search for scientific Truth and the increase of Knowledge is not only the inborn curiosity which shows itself among the earliest features of a waking intelligence, but is increasingly the desire to remove contradictions, to solve paradoxes, and to clear up mysteries which every progressive line of thought reveals to us. It is a search for clarity, consistency, and completeness.

Yet this undying but never satisfied thirst for Knowledge would not be maintained were it not that on its way it scatters abroad an abundant harvest of new facts and relations which prove to be of practical value, filling the field of our consciousness—the firmament of thought—with an increasing number and variety of objects, ministering to the practical wants of life which it both creates and satisfies.

Were it not for this, the occupation with science would be a pure luxury, the recreation of a few gifted minds; and it would remain unappreciated by the multitude, who would look upon it as a sport or pastime of these exceptional minds, without recognising that such sport and recreation play a necessary part in the economy of life; recognition of their value comes only when they lead to unexpected discoveries which profoundly influence both knowledge and conduct.

The word truth, however, has a deeper meaning than that of mere consistency and harmony of thought and vision. The undying and never satisfied search for Knowledge is accompanied by a tacit conviction —equally deep and indestructible—that the way of

pure thought and contemplation will lead to some lasting result, to some abiding resting-place, and establish some firm ground upon which we can build, and which may become the property of all, affording an anchorage in the troubled sea of doubt.

The existence of this desire in the human heart is just as real and even more important than the unalloyed thirst for knowledge. But if the history of modern science has taught us any higher lesson at all, it is this—that this resting-place and firm ground cannot be found by methods of science. Truth in this sense cannot be the goal of science; the latter twirls on the spindle of logic its unending and innumerable threads which it weaves into a texture of extraordinary complexity and absorbing interest. Yet this process has no end. The tapestry is never finished, is always changing, and what one age designs and partially carries out is thrown aside by a succeeding age as of little lasting value.

The summit which methodical thought, combined with observation, endeavours to reach, recedes further and further as lesser summits and numberless valleys present themselves on the way.

Amidst this comparative failure, except for the practical results just mentioned, the hope of finding truth in the deeper sense as the revelation of the truly real, must be abandoned and some other way found for satisfying our desire. Fortunately Art here steps in and solves the problem—at least for moments during our journey through life. It does so by a process in which it shares with Science but which it applies in a different way.

IV.

The aims of Science and of Art were not distinguished and kept rigidly apart in the earlier stages of civilisation, nor are they kept apart in the earlier stages of the education and instruction of children in the present day. Learning is made pleasant and even amusing, and play is directed so as to contain instruction and to stimulate the intellect. But in the course of the development both of social and individual life, it has been found necessary to differentiate more and more the methods of gaining an increasing knowledge from the ways and means of pleasing the senses and satisfying the higher emotions.

It is likely that the inborn habit of imitation and repetition has played an equal part in the development of science and of art. Both may also be said to rely upon an ordering process, resorting to a rearrangement of the material, that is, of the experiences which present themselves in the stream of thought, and form the various objects which fill the firmament of the soul. But, whilst a primary object of this ordering process in the case of science is to gain definition and distinctness, the first higher step in art seems to be to add some new impression to a given complex of Sensations, Thoughts, or Emotions.

This new element which, consciously or unconsciously, emerges in any artistic effort is the giving meaning, significance, and value to the contemplated object.

Both Science and Art start from, and depend on, a synoptic view of a smaller or larger complex of mental

experiences. Both also depend upon close observation and study of detail. But whilst science tries to introduce into clearly defined elements, which it finds, a logical order, the representative arts are more interested in tracing the order in which detailed experiences present themselves in Nature and actual life.

There is no doubt that science aims ultimately at understanding and imaging the natural order of things, and that the circuitous path of analysis and synthesis is expected to lead ultimately to a comprehension of the realities of Nature, Mind, and Life : it is nevertheless actually the case that the rearrangement of the world which science effects is highly artificial and abstract; whereas all the study and technical skill of the representative arts serves to make the natural order of things clearer and more transparent, and to give a grasp of reality in what we call its true nature, meaning, and value. Thus arises the paradox that art stands in closer relation to Nature than science does; the latter creating, not an artistic, but an artificial world.

The representative arts, notably Painting, Sculpture, and Poetry, seem to give us an interpretation of things natural which is more satisfactory to the contemplating mind than the increasingly complex and abstract view which science affords. The need of the human mind to find harmony and completeness is more easily satisfied by single creations of art which move in a limited area than by the abstract generalisations of science which rove into wider and wider regions, and at best afford a panoramic view of the universe.

In limiting itself to circumscribed regions or objects, things or events, art is able in rare instances to

afford that impression of completeness joined to clarity which, for a moment, arrests in the observer the restless search of the longing mind, giving satisfaction and repose.

Both Science and Art, in dealing with things and events found by observation and experience, rely upon a process of abstraction. Both destroy, in a sense, the natural order of things.

Science puts in place of this natural order, a logical order revealing, so to speak, the skeleton of the natural texture around which the listless hand of Nature weaves its picturesque variety of actual things and events.

On the other side, Art deals mainly with that complicated web, which it tries to understand by disclosing to the physical or mental vision the meaning which it conveys and the unity which pervades it. In doing so Art attains to a finality and completeness denied to Science. Science, on its part, leads back to actual life, stimulates the practical interests of the mind, and creates the new world which is accessible to every one in its achievements.

On its way Science certainly affords rare moments of intellectual pleasure to those who are gifted with the power of discovery and invention. Its onward course is, however, never interrupted, and the greater the number of discoveries and inventions, so much the more rapid is the onward pace.

Art, on the other side, in its greatest and rarest creations and performances does not lead immediately to action in its beholders, though the rare genius who is able to create these marvels may be continually aiming at something more complete and perfect.

These remarks on the work of Art refer more directly to the representative or fine arts, including poetry. But the artistic sense of the human mind leads from these in two different directions—the one more practical and connected with everyday life, the other more sublime and imaginative, leading into what we may term the spiritual world.

In the former direction lies the combination of the fine and useful Arts in Architecture and the large field of purely decorative Art. Here, usefulness and beauty are combined.

In the other direction lies the Art of Musical Composition. This finds little of its material in actual existence, but depends on the creation of the world of musical sound, of harmonies and melodies which it combines into purely imaginative creations appealing directly to the emotions. Working, therefore, with a material which it has had first to create, it is the latest of the arts in historical appearance, and seems to have been unknown and undreamt of in antiquity so far as the possibilities are concerned which the sublime creations of modern times have revealed.

V.

As we have seen, both Science and Art aim at importing some kind of order into the original chaos of our sensations, feelings, and endeavours. Both stimulate and are dependent on a process of selection or abstraction; both start from the natural order or disorder, if

we may say so, of our impressions with the object of ultimately understanding the same.

In this endeavour Science is continually foiled and led back again to the primitive enigmas and mysteries of existence, whilst Art gives us momentary glimpses of the meaning and unity of things. Science leads us back to the real world and stimulates action, while Art translates us into an ideal world and, except in those who are creative, tends to repose and contemplation and to the rare and transient moments of complete satisfaction.

The fact that from our infancy we live in the society and under the guidance of our fellow-men makes it necessary that the inherent restlessness of the individual mind should be regulated so as to lead to concerted action. This is the origin of social order, without which early history as well as our childlike behaviour show that no progress is possible. The activity of individuals by themselves is frittered away and the world of values checked in its growth.

What we term a moral order is required to put concerted action and successful co-operation in the place of a mere fortuitous concourse of isolated individual strivings. In civilised communities this social order and rule of life exists and controls from the earliest age the strivings of the individual.

In the dawn of civilisation among savage peoples the process of ordering and regulating life seems to have been slow and, in some cases, stagnant for long periods. The beginnings as well as the great epochs in advancing civilisation seem to be marked so far as we can trace them by the sudden appearance of gifted

and highly exceptional individual characters, and with them alone history seems to start and advance. How they were or are still able to perform the difficult task with which they are entrusted remains a twofold mystery: first, as to the definite design or scheme according to which they successfully attempt to bring order into chaos; and secondly, as to the power which they possess to impose this order upon the community of human beings over which they preside.

And these two mysteries in the history of humanity form still, at the present day, the two problems of morality—viz., the problem as to the content of the moral law and the problem of moral obligation. But when once a moral or social law is established, and the obligation to follow it impressed upon the individual mind, history and civilisation have always taken a rapid stride in advance.

On the other side, whenever the spell which the moral law exerts on the individual has been broken, the whole fabric of civilisation has become endangered. Science, Art, and practical achievements have suffered, and have in notable cases, recorded in history, become extinct: the whole world of values, the creation of the human mind, has suffered irretrievable loss.

As the world of Values—that is, Science, Art, and Social Order—is a creation of the human mind, this creative faculty must have an inherent constitution and the process of its activities must be subject to certain inherent principles. To find and to apply these principles, that is, to establish Moral Order, is the highest problem set before human thought.

CHAPTER XIV.

THE WORLD OF FREEDOM OR OF VALUES.

I.

In an earlier chapter of this treatise we showed how the totality of existence which we have identified with the field or firmament of consciousness so far as every one of us is concerned, undergoes in the course of life a change which consists in assigning to certain experiences within this totality an additional form of existence which we call Reality.

That selected portion which we call the real World becomes distinguished from and frequently opposed to the permanent background which, though it exists as certainly as the other, is not considered by us to possess Reality. We saw that there are various forms and degrees of this Reality or more pregnant existence; the main criterion of all that we call Real being is the tacit or overt conviction that it exists in a similar manner for other persons besides ourselves.

The whole complex of such realities might be called the World of Things, were it not that we are accustomed to apply this term only to complexes of perceptions in Space and Time. It is quite true that we use the word Thing frequently also for experiences which do not

belong to what we call the outer World, but retain a purely personal existence. Thus we may in prose, and still more in poetry, call Pleasure or Pain, Faith or Doubt, Hope or Despair, Joy or Sorrow, Things, but in general when we talk of the World of Things we should not include such experiences. It would perhaps be better to speak of the World of Objects were it not that the word Object always calls up in our thoughts an opposite signified by the term Subject.

Some languages, such as the German, have a word to denote this objectivity without raising in the mind the thought of subjectivity. The word *Gegenstand* has been translated into English as Presentation, but as this term is likewise used to denote what in German is called *Vorstellung*, it is not very helpful for our purpose.

We have also seen in the foregoing that the notion of Reality as belonging to a certain portion of our individual experiences is capable of a further graduation, and that we speak of the truly Real as a higher order of some of the real things. The world which comprises the truly real or the great Verities, has in modern philosophical literature been termed the World of Values.

This World of Values, we have seen, is a creation of the human mind. We might with some propriety call it an invention or discovery of the human mind, as we are tempted to think of it as something which has existence independent of special individual minds, being a general possession, if not of all certainly of many minds, exhibiting thus one of the main characteristics of Reality. According to our view, however, this World of Values does not stand in opposition to the much larger World of Things which are indifferent—it occupies a scattered

portion of the firmament of consciousness in the same way as indifferent things, which also fill it in a dispersive manner.

And though we are inclined to identify Value with the interest we take in anything, the interesting things or experiences are continually being crowded out by indifferent ones.

It is natural that in the course of civilisation the indifferent things in this world come to receive, as such, less attention than those experiences which are more intimately connected with the necessities of the physical and, after that, of the emotional life of human beings. This attention may be almost entirely limited to their usefulness; and it took long ages before a disinterested study of natural phenomena made its beginning.

Probably one of the earliest inducements to embark upon the course of pure observation and registration of facts is to be found, as already stated, in Mensuration and Star-gazing undertaken for the sake of wanderings and settlements by sea or on land.

At this stage the fascination of Geometry and Astronomy, and the exultation afforded by some of the earliest discoveries in these fields of research, created in particular minds a love of pure Science, endowing what was indifferent to the multitude with a special charm and interest of its own. This birth and early development of what we now call Science, the pursuit of natural Knowledge for its own sake, depended upon a process of ordering, of selection and arrangement of observations and inferences.

In the early life of the individual nowadays, and in civilised societies, the earliest attention of the infant and

child is directed towards acquiring practical habits in the common performances of life in an ordered Society; then comes, first the playful and afterwards the more serious process of acquiring Knowledge and creating interests without immediate reference to the wants and necessities of later life. But all through it will be found that the world of interesting and valuable things and thoughts is discovered, entered, and enlarged by various processes of arrangement and ordering, beginning with the simplest forms of spatial and temporal order and rhythm, through a process of selection and repetition up to the unfettered play of the imagination and the stricter marshalling of facts and activities in what we may term the applied logic of science and life.

Nowhere, however, do we find that either the ordering processes of Science, the fanciful creations of Art, or the important regulation of social affairs adds anything to the material which is, in various ways, subjected to this order.

The World of Order or of Values seems thus to be the product of a special tendency of the human mind which is quite different from the processes of Nature. These we have learnt to consider as depending on the conservation of certain principles or elements of existence subject to a uniformity which we become accustomed to call the Laws of Nature, affording no room for freedom and creation.

But these latter are just the special prerogatives of that world of Order which the human mind creates and extends by its own activities. It is true, however, that this ordering process in all the three departments of Science, Art, and Moral, that is, Social Life, in-

voluntarily and, as it appears, without premeditation, not only results everywhere in creative efforts, but adds to its world of invention and creation the wonders of Discovery.

Wherever the mind through its creative effort introduces Light and Order, new facts reveal themselves which are mostly unexpected: gifts of surprise which Nature bestows upon the thinking mind of man as the fruit and reward of his labours, increasing the material with which he has to deal, and prompting to new efforts and the invention and application of new methods.

II.

Examples of this inventive process in the regions of Science, Art, and Practical Life are plentiful. I will here dwell only on the inventive faculty as displayed in industrial enterprises, such as constitute by far the larger proportion of the occupation of human beings in civilised communities. Here, Regularity, Arrangement, and Statistical accuracy not only make the conduct of affairs much easier and more effective, but they set the mind free to look out for new departures and new opportunities. Such a return from the discipline of a well-ordered system of routine work to the free outlook on Nature and life rarely remains unrewarded, and minds which are gifted with the ability of keen observation get the chance of exercising their ingenuity, whilst the routine of daily work falls to the lot of those who are industrious and accurate but lack the inventive faculty. Thus the inventive genius

receives and gains more freedom, and the faithful worker with less brilliant talents finds a sphere of increased usefulness.

Many practical schemes fail indeed through the want of originality, but probably an equal number of highly suggestive ideas and inventions never come to fruition, because the leading intellect does not possess those more homely qualities of regularity and order which are indispensable in every business of life.

For our present purposes it is more important to realise how different the process of arranging and ordering is in the three great departments in which the pure intellect, the imagination, and practical organising power are respectively and more exclusively at work.

Within the region of the pure intellect, which works through observation and logical inference, the mind elaborates the new and artificial world or scheme of things which it put originally in the place of the natural order, making it possible to grasp firmly at least a small portion of the manifold and tangled experiences of the untutored mind. It is, however, always forced to recognise that these clean-cut schemes and arrangements are merely provisional, and do not reproduce that natural order in which things and events present themselves to us. Yet the aim always remains to come nearer and nearer to this natural order though this goal is never attained.

Art, on the other side, is more perfect and more successful the closer it sticks to Nature—the more successfully it singles out definite natural situations and events which it puts in a limiting framework, arranging and ordering its material just so far that

a glimpse is momentarily afforded of that harmony and unity which the human mind desires to see and believes to exist in the reality of the whole universe.

Art thus gives satisfaction to the emotional side of our nature.

In the practical affairs of life and human conduct the case is quite different. Here, among human beings, the further civilisation advances the plainer it becomes that many of the natural promptings, habits, and desires of the animal world which are there allowed an unfettered sway, must be curbed, altered, and controlled.

This process demands the existence of an ideal scheme and of a supreme principle which is not to be found in the natural order of things, but is a creation of the human intellect.

Thus we may say that in Science and Knowledge the mind has to be directed, that in Art it requires a design, and in practical life a highest principle. The direction which the scientific investigator takes is indicated by Nature and the work of his predecessors combined. The design of the artist arises in his own mind through a process which is spontaneous and cannot be understood by analogy with anything that we can clearly define, whilst the highest principle for the guidance of human conduct remains the great problem of which the solution must either be found or accepted from others by every individual person.

Another distinction between the three principal creations of the human mind follows from the foregoing remarks.

We may say that pure Science does not concern itself

with any ulterior problem lying outside of its own region of thought. It is conceivable that the pursuit of pure knowledge may be carried on for its own sake; though the discoveries of Science lend themselves to practical application, and this on its part creates new problems for scientific treatment.

Examples of scientific work carried on to satisfy purely scientific interests may be found in such studies as the Theory of Numbers or the higher branches of Geometry. Discoveries in these regions are rare, and few minds are content to live in this rarefied atmosphere of thought. To them, however, the rare and precious pearls they find afford a delight which almost approaches that joyful surprise which artistic creation of the highest order affords.

The guiding principle in scientific research and the quest of new Knowledge is a strict method which the pursuit of Science itself has slowly but firmly established. What it will lead to cannot be foreseen; and many a field of natural knowledge has been explored with quite other results than were expected or looked for.

At the opposite extreme among these creations of the human mind stands the regulation and organisation of human conduct in human society. No clear method has been found by which the problem can be solved, but without some ideal and some more or less defined purpose this work cannot be successfully carried on. Thus practical life always leads back to some highest principle or rule of life, and to the supreme problem of finding and establishing this. If we compare Art with these neigh-

bouring but opposite fields of mental activity, with Science on the one side and practical life on the other, we find that it is quite self-contained—it has neither the strict method of Science nor the ulterior purpose of practical life. It creates its own method and has its end in itself.

The creations of great artists are each of them independent—self-contained—and afford in consequence not only a joyful surprise but that special satisfaction and repose which the restless and weary soul is in search of.

These reflections explain to us why students of Nature as well as artists take little interest in the history and the philosophy of their pursuits. For both are self-contained, though Science knows no finality, and is therefore not infrequently highly appreciative of artistic creations which possess just that quality of finality lacking to itself. In contradiction of this the practical purposes of life, especially in highly civilised communities, continually create new problems and set the highest intellects thinking and seeking for a firm foundation whereon to build and the right method to be pursued in their labour of organisation.

This highest problem has been solved in the earlier stages of civilisation by Religion and in more advanced societies by Philosophy. To these two—the earliest and the latest agencies of culture—we must now give our attention.

In addition to affording or trying to afford a rule for practical conduct and the creation of social order, both Religion and Philosophy have, consciously or

unconsciously, dealt with another problem which we may term the unification of thought.

As culture and civilisation have advanced, the selective process which worked from the beginning of history and which works more consciously in the early years of individual life, has led to a disintegration of the total and changing content of human thought and interest. Both thought and interest were first unconsciously, and in the sequel intentionally, guided into separate courses. The impression of the whole firmament of consciousness has yielded to divers aspects, calling for divers methods of procedure. Everywhere distinct achievements have only been secured by a process of limitation, by the concentration of attention on specific well-defined regions of experience.

But this disintegration and limitation cannot advance very far before the distinct paths chosen in each case decrease in fruitfulness and a return to the original totality of interests and of life is felt to become necessary. Both Religion and Philosophy have always in their highest forms recognised this desire for a connected or synoptic view of the totality of things, and have accordingly set themselves to solve the special problem which neither Science, nor Art, nor practical life can solve by itself. The outcome of this conscious or unconscious effort may be termed Wisdom.

Religion, wherever it has been a living power, has claimed to contain and give this highest Wisdom: Philosophy, rightly and modestly, has claimed to be only the love of Wisdom, and in its first fully developed period of existence renounced the high pretensions which an earlier period had audaciously set up.

Thus, when treating in the following chapter of Religion and Philosophy, we shall bear in mind that both deal with a twofold problem: the practical problem of affording a firm foundation and rule for human conduct, and the further problem of affording a view of the totality of things.

CHAPTER XV.

PHILOSOPHY AND RELIGION.

I.

It is likely that whatever existed among primitive peoples of higher mental life was comprised in their religion, and kept alive by some form of observance or cult. In a more advanced stage of civilisation philosophy may have tended to replace religion. Yet both these products of human thought have in later times, to a large extent, fallen into the background; in fact, in many highly civilised countries at the present day religious worship moves in secluded spheres, and Philosophy forms the privilege of a very small number, even among thoughtful persons.

It is not our object to investigate the historical appearance either of religious faith or of philosophic thought. We are more definitely interested in the beginnings and the growth of these mental activities in the individual mind in civilised society of the present day. Of these we have had occasion to treat in an earlier chapter, where we traced the religious sentiment to some form of obedience, that is, of acceptance of a leading authority, and the feeling of obligation to follow its commands.

This attitude of the child's mind has its origin in the personal communion with parent or teacher, showing itself first in the home and later in the acknowledgment of a social rule and order.

Alongside of this moral development, the sanction of which is to be found in a vague and as yet undeveloped religious sentiment, there proceeds the intellectual development of the child's mind, which is fostered by methodical instruction as well as by the experiences and observations of daily life.

It has commonly been found necessary for purposes of efficiency and to facilitate the training of larger masses, to separate the two branches of education—the Religious from the Intellectual and Technical; and in some communities this separation has resulted in distinguishing mere instruction from education.

In consequence of this a question has been raised which would have been impossible in communities where science and learning had not attained to that high and specialised development which in modern society has made them seemingly independent. This refers to Morality itself; for it is still generally recognised that the rules for the conduct of life require, for their preservation, a definite foundation in the belief that some kind of order must be held supreme and carry with it the obligation for every member of society to follow it.

Is this foundation to be found through Science and Learning, or is it dependent on the earlier undisputed connection of Morality and Religion? This question has received much attention in recent times, and has been differently answered by different authorities with-

out, as it seems, any likelihood of an agreement being arrived at.

It has been maintained by some that Morality will always hold its own; others hold that some philosophic or religious doctrine is required, the belief in which shall be strong enough to prevent the breaking of the Moral Law and a consequent disregard of the accepted rules of conduct; and others again, in their search for an acceptable doctrine or reasoned creed, find it more and more impossible to attain to the latter by scientific reasoning, thus feeling themselves forced to fall back on some religious conviction such as has come down to us from earlier ages.

Not many years ago civilised societies, alike in this country, on the Continent of Europe and in America, would, in general, have agreed that the supreme rule of life might be summed up in the doctrine of universal brotherhood, be this expressed in the Christian doctrine of Love or in the positivist doctrine of Altruism, and that what is Right is a Life in conformity with this doctrine of universal brotherhood; but recent events have tended to show that even in highly civilised circles the idea of Right as expressive of a universal Love or Brotherhood has been seriously shaken if not openly challenged.

The question just mentioned has therefore been more insistently asked. The demand for an answer is no longer theoretical but has become eminently practical, and it has set an additional problem for philosophic thought.

II.

It appears from the foregoing that Philosophy has, in the present day, a threefold task. It may be required to afford a reasoned creed either by adopting the results which have been gained through Science and Scholarship or by special methods of its own. This creed should afford such a view of the world and life as will support the moral structure of society.

In the second instance, it has to unify thought as displayed in the three independent regions of Science, Art, and Morality.

And, thirdly, should Philosophy not be able to solve satisfactorily the first problem, it will have at least to show the possibility and plausibility of an independent source in the human mind for the existence and growth of the Moral Order. Philosophy would have to demonstrate the possibility of Religion as an independent mental activity with or without attempting a logical construction of its contents.

For those who adopt the first of these three positions Philosophy will have to take the place of Religion, and will have to express its creed in such a manner that it can be popularised in the noble sense of the word and enter into the thoughts and life of the majority of human beings.

On the other hand, for those who adopt the last of the three positions defined, this task of popularising would not exist—it would be left to Religion to find for itself an entry into the minds of men. Philosophy would

interfere with Religion as little as it does with the contents of any department of Science or Scholarship.

It is with this last of the three problems that we have to do at the present moment. With the existence of Science, including its exact methods of research and its canons of criticism, we are not specially concerned. They have in their way extended the field of human knowledge to such an extent, and left their mark on thought and life so unmistakably, that they require no special recommendation. The nature of scientific methods will indeed always form a subject of supreme philosophic interest, as will especially the question of the value and limits of those methods.

So far, however, as Religion is concerned the attitude of the modern mind is tending in the opposite direction. Though originally a far more widespread and popular concern than either science or criticism, it has latterly lost its interest for many, both with the minority of thinking and the large majority of less educated persons — in fact, in some circles of modern society it has almost become tabooed.

For us, therefore, who emphasise the necessity of finding some intuitive or reasoned—yet in any case clearly defined — foundation on which to build the structure of moral culture and society, the question of the nature and possibility of Religion is of paramount importance.

III.

In dealing with the problem mentioned in the last paragraph, we must go back to the original conceptions

which we formed of the human mind. We accepted the view established in British philosophy through the labours of Locke, Berkeley, and Hume, that the "stream of thought" or the "Firmament of Consciousness" contains nothing which cannot be traced back to some definite experience. But we also adopted the addition which Leibniz made to the well-known formula when he stated that nothing is in our thoughts which cannot be traced to some definite experience, except the mind itself, and we interpreted the latter to mean the totality or *ensemble* of all present and remembered experiences that form the background or setting of any special experience, thought, or feeling which may be at any moment the object of our attention.

The mind or intellect itself is nothing more nor less than this half-illuminated background which accompanies us throughout the conscious moments of our life.

In this continuous flow of undefined and vague sensation, certain complexes stand out from the earliest days of our infancy with more or less clearness, permanence, and recurrence, and these form the beginning of our cognisance of an outer world. They acquire an independent existence over and above their purely subjective features in the stream of thought when we learn that other persons share them with us.

This additional or higher form of existence we term Reality or the Real, compared with which the fleeting and less definite features of our primordial experience appear to be less real or unreal. We have also learned that this real world has many Orders and various Degrees; and in it again we distinguish a selected number of Sensations, Thoughts, Ideas, and Feelings,

which we consider to have a still higher degree of Reality, variously termed Value or the truly Real.

We may thus say that the contents of our Consciousness at any moment are made up of three classes or regions of reality, the lowest and largest class consisting of fleeting, undefined, and vague sensations; another class of more or less well-defined objects which we share with other persons; while a third class possesses experiences to which we attach more or less value, constituting the object of our special interest. These regions are not clearly marked off, but are apt to flow into each other; their contents wandering as it were from one class to another. On this last property we must now dwell at somewhat greater length.

We have already in the foregoing given examples of the way in which purely subjective experiences may become real objects in the field of consciousness. We may now state more generally that this movement from one form of experience to another constitutes one of the principal features in the life of the mind.

Using the word Sensation or Thought in the widest sense, we may say that thoughts are continually rising out of the dim and half-illuminated background of consciousness into the daylight of the region of Reality, becoming definite, individualised, and communicable to others; acquiring frequently the higher Reality of Interest and Value; while other thoughts recede into the lower regions of indifference and vagueness, or fall altogether into oblivion.

A general tendency, however, may be noted, inasmuch as both in the individual and collective

mind objects of Reality are continually on the increase, and on their part supply the highest region of value and interest with increasing content. Of this latter process it will be well to give some illustrations.

A most prominent example of how the real world increases for us individually and collectively is to be found in the discovery of scientific Knowledge, which is promoted in manifold ways. What we at one time have only seen dimly and confusedly, gains automatically as well as through well-established methods, clearness and defined individuality. Thus the analytical processes of Chemistry show us in a compound its different ingredients, the telescope dissolves the nebula into a cluster of stars, and the microscope reveals more and more the endless intricacy of inorganic and still more of organised structure.

By a reverse process the synthetical and ordering methods of scientific research produce objects unknown before, and help us to build up the artificial world which surrounds and envelopes us in an increasingly complicated network of relations. This latter process is still more characteristic in the domain of artistic production.

The creations of the sculptor, the painter, the musical composer, or the poet, originate in the mind in the form of vague, fleeting intuitions, images or melodies, which gradually gain clearness and definition, and may result in the production of some great work of beauty in which external sensations or ideas are so arranged and ordered as to appeal to our feelings, gaining interest and value and raising the indifferent

Reality of the objective world into the region of the truly and supremely Real, the world of Values.

But the most important instance of this growth and advance of the purely subjective into the regions of Reality and of Value, or as we may also term it, into the regions of the physical and the spiritual world, is to be found in the slow and hesitating emergence of the moral sentiment out of its dim half-conscious existence into the clearer conceptions of definite duty and the higher form of righteousness and goodness. In this latter region the moral or religious sentiments become the guidance and support of our practical conduct and our social life.

This growth and development of the moral sentiment must have been a very slow one in the early stages of civilisation. It was there probably the prerogative of single great minds who as prophets, priests, or lawgivers stood out among the rest of a tribe or nation and led the way to a higher stage of culture through the imitative propensity of human nature. This process works more rapidly and effectually in modern societies through the influence of education, which begins with the parental care in home life, the surroundings in the school, and the membership of an ordered society. Yet it still remains the prerogative of the few not only to maintain this moral influence but to make it more durable, more impressive, and more spiritual.

No system of education, no conventional rules of society, no code of laws, and no enactments of a government or constitution, nor even the doctrines or ritual of a church, suffice to maintain the moral and the spiritual. Morality and Religion are eminently

personal attributes, and except we behold them active in living examples of the highest order, they will soon be lost and the level of true culture will sink lower and lower.

This involves a curious paradox, as does the origin of all important potencies. Without a society of many members, morals would be impossible, but again the enactments of morality are for the first time framed by an individual mind which seems to stand outside and above the members of a tribe, society, or nation.

The inspiration seems to come to such a mind not only from its communion with other minds, but also from an independent spiritual source. It is, in fact, what we may term a revelation.

IV.

A great deal has been written about the origin of the moral and religious sentiment, as also about the origin of life. Attempts have been made to co-ordinate the phenomena of the living creation with those of the physical world. These attempts have led to no satisfactory conception, and biologists have, in recent times, arrived at a point of view from which the existence of life or the living principle is considered to be a primordial fact, which has to be accepted as unique and irreducible to purely mechanical conditions. In a similar way the phenomena of consciousness cannot be resolved into those of inanimate nature, but must be studied in their own special

sphere. And so it is lastly also with the phenomena of the moral and religious consciousness: students of ethical phenomena have done well to take these as unique and irreducible to other mental experiences, such as the purely intellectual.[1]

These different and to a large extent independent regions of events invite us nevertheless continually to repeat the attempts at co-ordination and correlation, because the transition from one region of facts and events to another seems gradual and imperceptible.

Thus certain appearances of dead matter resemble most closely those of the most primitive organisms; the lines which divide the inanimate from the animated living creation seem difficult to draw with accuracy. Still more difficult is it to trace the final signs of that mental life which raises the living automaton to a consciously active being.

Everywhere we gain the best and most impressive information concerning any distinct class of existence by starting from and keeping steadfastly in view the full-grown reality.

With this truth in view we tried to show at the beginning of our reflections that the outer world is not revealed to the infant mind in a primordial fashion, but that it is through the fully developed personality of the parent that another existence is presented to the infant consciousness. So also the true reality and meaning of the Moral and Religious Life did not become fully clear to our view until its totality and ruling principle was revealed as Love.

And so in every individual instance, the greatest

[1] See especially W. R. Sorley's 'Gifford Lectures.'

thing that can happen in the unfolding of the infant soul is when on its entry into this world it meets with the mother's love.

Yet here we must hesitate for a moment, for in thus describing what we may term the genesis of moral life in an individual soul, we are perhaps stating merely a rare and only an ideal case. In the majority of instances what should be the natural course of things is marred or distorted in the actual world which surrounds us.

In this way, what should be the normal and ruling order is only too often spoilt.

V.

The last-named circumstance, that in actual life we meet so rarely, if ever, what should be the normal and true state of things, applies of course to every instance where the principle of Freedom which we have considered to be the principle of Order comes into play.

In the physical and cosmical world, where rigid mechanical rule seems to us to have undisputed sway, we see nothing of mistakes, error, or failure. No stunted beginnings, no lost chances are there to be found. Everything is natural and perfect and possesses the same reality. But with the entry of the ordering process of life into the physical world, there enters also the element of failure, of loss, of misdirected and unsuccessful effort, and the lower we go down into the first and primitive evolution

of life, the greater the waste seems to be which accompanies the development of higher and more complex forms and structures.

And even in the highest regions of organic and mental life, the lost opportunities seem to be many and the successes comparatively few. This has led many thinkers to the view that excellence is only achieved by the sacrifice of a vast number of existences, so that the few may succeed and rise to a higher level. But this is not the view which the higher Religions have taught us. Here we meet with the doctrine of universal love and brotherhood, with the principles of justice to all men, of Equality, Liberty, and Fraternity, all of which are summed up in the ideal of Love.

This must be a paradox to those who believe that the ways of organic evolution are the same as those of moral and social evolution, and it is a difficulty that has been pointed out by one of the strongest supporters of the theory of evolution, which everywhere points to a struggle for existence and the survival of the fittest.

Huxley, probably the greatest scientific philosopher of recent times, has not attempted to solve or to gloss over and minimise this the greatest of all paradoxes: he has declared on the one side that he believes that morality will always hold its own without the support of any religious dogma, thus adopting very much the position expressed by Kant in that majestic passage standing at the close of his Practical Philosophy, where he exclaims—"Two things impress me with ever renewed admiration and awe, the aspect of the starry heavens above me and of the moral law within me." On the

other side, Huxley urges more strongly than Kant the seeming contradiction, for he tells us that the physical world sanctions all those activities for which human beings are liable to be punished. Nature thus does not help us in our moral effort; and yet we are not to run away from the danger, but rather to combat it.

It is, however, clearly not possible for the thinking mind to rest satisfied in this purely agnostic position, although it may be expressed in less prosaic and more poetic words:—

"Over me the shades of night are falling,
I fain would join them if I knew the way,
In the dusk twilight I can hear men calling
This is the way and this—but who are they?

There will I stand: perchance across the forest
The gleam of lamps may flash athwart the night:
It may be that this way the Bridegroom cometh,
And I shall follow in his own clear light."

VI.

The question then presents itself to us: How is Morality possible? and closely connected with this question the other question: How is Religion possible?

We must find in the constitution of the human mind the original data which in the course of individual and social development have led to the moral order of society and the religious convictions of mankind. The view we have taken of the human mind must help us to answer these questions.

We have shown in the foregoing how a certain

number of purely personal experiences detach themselves in early life from the originally dim and confused background which we have termed the "stream of thought" with William James, or the "Firmament of the Soul," which we have considered to be a more appropriate metaphor.

We have also seen that this detached portion of our experiences rises into greater clearness and definition, and acquires the attribute of Reality, though originally the elementary experiences which constitute the real world have neither less nor more existence in the field of consciousness than other experiences which we consider to be less real or unreal.

We have also seen that many of these seemingly unreal experiences rise out of the region of mere existence in the mind, and join the orderly system and complex of real things. They do so by various features which they exhibit or develop; the most important of these being distinctness, definition, and the fact that we share them with other persons. We then say that they gain external or objective reality in addition to the lower form of reality, that is, mere existence.

It does not, however, follow from this view that of our personal experiences those are less important or valuable which are not able to acquire the same definiteness and communicable features as the sensations and perceptions which are endowed with spatial location and attributes. In truth those experiences which do not rise into the clear daylight of the outer world remain, as it were, nearer to our innermost self, forming, not the indifferent facts and events which

seem to surround us, but the most valuable and interesting portion of our total experience.

It is also only by remaining or becoming associated with these merely personal experiences that things of the outer world acquire the still higher form of reality which we term value. Through and in them consists the individuality of different minds and persons, and this would be destroyed if all our most valuable experiences could be rendered objective and impersonal in the same way as the facts and events of the outer world seem to us to be.

The diversity of emotions and feelings is the main feature in the region of Values and in the world of Freedom. And yet while retaining this personal feature, we are continually and irresistibly driven to communicate this portion of our inner world to our fellow-men, and to create an objective existence, or Reality, through which this innermost possession can grow and become active in social intercourse.

What has here been said refers mainly to the æsthetic distinctions of beauty and its reverse, and to the moral distinctions of Good and Bad, or of Right and Wrong.

In the latter case—that is, in that of Morality—the desire to attain to definite convictions is much greater than in the case of æsthetic opinions or matters of taste, for the simple reason that we look upon the moral character as belonging to all our actions and the whole of our life, whereas the æsthetic attributes are, for most men, mere matters of contemplation, though for a few who are creative artists, the attainment of beauty may be as great an obligation as the moral rule of life should be for all men.

The queries put above can now be more clearly formulated as follows: Leaving out the æsthetical problem with which we are not immediately concerned, we may ask the question—What means exist for the individual or collective human mind to acquire clearness in matters of Morality and in matters of Religion? that is, as to the content of the moral law and as to matters of faith.

In order to answer this question we may consider the means by which external objects acquire their Reality in our estimation.

One of the principal attributes of external objects is that they offer what we term resistance to our free and unchecked bodily movements. Solidity and substantiality are attributes which we attach to such clusters of bodily sensations as resist our unchecked or free movements. The earliest of these checks to our primordial restlessness are the presence and the action of another person or persons. But after having learnt that experience is checked in its immediate surroundings, the infant mind soon learns to attribute resistance to lifeless things also, and gradually to all those clusters of sensations which form the coherent system or order of the outer world. But here arises a marked distinction: the encounter with lifeless things may result in unpleasant or painful feelings, but the encounter with persons may contain also feelings of a different kind, which are not immediately traceable to bodily encounter, but arise in our minds by mere contemplation or awareness of a personal presence. Thus the smile or frown of a mother may give rise in us to feelings of joy and pleasure or of disappointment and sorrow.

Without going further into detail, we may say that bodily checks may, by producing pain or discomfort, lead to disappointment on our part, but that when the personal element is introduced, we experience a special sensation, a pain or discomfort which we term Regret or Remorse, and inasmuch as we look upon many of our actions as free, this feeling of remorse is connected with that of self-reproach.

We may regret in both cases our past actions, but this regret acquires a special feature of sorrow if it is connected with the signs of displeasure in another person.

These elementary and quite simple experiences in a child's life are developed and made use of in the process of education, and become extended through conversation and teaching into a code or rules of conduct which may exhibit a great variety of precepts and be based upon very different feelings, ranging from mere physical pain or pleasure through the whole gamut of sensations and emotions to the highest and most spiritual affections which are summed up in the word Love.

And thus, gradually there emerges out of all the various experiences of disappointment and success, of joy and sorrow, a feeling of what is the right thing to do, and of such actions as are wrong. And here it may be remarked that the nature of wrong is more easily taught and recognised. This is shown by the fact that most codes of Morality dilate at length upon what is wrong and to be left undone; whereas only at a higher and later stage are we taught that Love sums up the whole of Righteousness and Goodness in one comprehensive guiding and unfailing sentiment.

VII.

One of the objects of these remarks is to impress upon the reader the importance of the personal element in the growth and development of the moral sentiments. The earlier and later experiences of infancy and childhood acquire a living force through the fact that it is in a definite personality that they are gathered up to a united whole, which no scientific or philosophical analysis can dissect into its manifold and varying constituents.

It is only the synoptic and comprehensive view which gives reality and force to the combined influence of these incidents of our earliest life. To this we must add the not less important fact of example. Without the conscious or unconscious observation that those persons who surround us are under the same obligations or constraint as they impose upon us and follow in their action similar rules, the precepts and injunctions of a parent or teacher will have little or no lasting effect; they will not create habit, but at best only a sullen submission to rules which are disregarded as soon as the physical constraint is removed. For habits are formed only through repetition, and this ultimately rests on imitation.

The restless and inquisitive mind of the child which in modern systems of education is far more and earlier stimulated than it used to be, soon manifests the desire to know the reason of a great many rules of conduct which are at first willingly or unwillingly, but unquestioningly followed. To this must be added the

great preponderance which is now given to scientific teaching, in which the cause and effect of events and actions are largely dwelt upon. This promotes a sceptical tendency in young people, and nurses a desire to know the why and the wherefore of those moral restraints which are imposed upon them.

In times not very far distant the teaching of morality went hand in hand with religious teaching, which met the demand of the young mind to know the reason for the rules of conduct laid down in the teaching of the home and school, and ranged them into a general view of the physical and social order of the world and life.

Notably Christian education always put into the foreground of its moral and doctrinal teaching the principle of Love; enlarging the experience of the loving care which the child received, or should have received, on its entry into this world, into a universal principle; the love and care of a Divine Being who occupies the same position to the whole of mankind as a parent occupies to his offspring.

This view of the world and life has, however, been undermined, and in many instances destroyed, by the two great agencies through which the thought of modern times has acquired independence and ways of its own. These two agencies are the spirit and methods of science, and those of criticism. The combined effect which we may say proceeded from above, that is, from the influence and teaching of the highest intellects, has been met half-way by a not less powerful movement which started so to say from below—that is, from the growing discontent which has spread

among the lower ranks of the increasing population in the civilised countries of the modern world.

Here again, the influence of distinguished thinkers has given to this discontent a sort of sanction in promoting a materialistic view of the world and life, utilising cleverly and plausibly the results of higher science and criticism to formulate and give expression to the legitimate demands of the masses of human beings as distinguished from the privileges usurped or in any case possessed by a selected few.

It is not necessary to dwell at any greater length on this condition of modern life and thought. It is enough to point to the disintegration of both, and to the necessity of finding the way back to a unity similar to, though in some ways quite different from, that which with all its deficiencies and drawbacks ruled the Christian world in the Middle Ages.

No scientific thinker has realised this necessity more than Auguste Comte, whose influence, by spreading the Positive or scientific spirit, has been as great as his failure to evolve out of the Positivist view of the world a satisfactory moral system, or what he termed a Religion of Humanity.

And, next to Comte, no thinker has made it clearer than Huxley in his statement referred to above, that the moral or spiritual view of life stands in apparent opposition to what we may call the natural order of things.

VIII.

The foregoing remarks explain why, in quite recent times, thinkers belonging to very different schools have united in the endeavour to establish what may be termed a reasoned creed which should support the moral ideals of Humanity by a rational indication of the position which Morality holds in a comprehensive view of the universe, and especially of human life. But though this has been the endeavour of many philosophers, they have failed to come to any agreement, and have, consequently, not succeeded in rendering any of their various schemes generally acceptable to large numbers of reflecting persons—in fact their views have not gained Reality, lacking as they do the first requisite of raising an ideal from a merely personal to a real existence, viz., the consensus of our fellow-men of all ranks.

Many causes have contributed to frustrate the success of so noble and high-spirited an enterprise. And one of these may be usefully considered in connection with the special view of the human mind which we have tried to establish in these pages.

A reasoned or a reasonable creed means a view or doctrine of the world and life which carries conviction to the mind of thinking persons. Such convincing force may be gained in two ways. It may be gained by the immediate experience of many persons, and in this way become a habit of thought. Of this nature is the evidence of our physical senses which picture to us the order of the external world. This forms

for the vast majority of men the fixed datum line from which they start, both in thinking and doing, in theory as well as in practice.

But it may also mean a view gained by distinct methods of reasoning which carry us away from and beyond what is immediately given by the evidence of our senses, into a region of more or less abstract thought. Of this nature are all the intricate reasonings of science as well as of philosophy. They gain their convincing force by a logical process which appeals to thinking persons, and is by them considered to be conclusive.

The further civilisation progresses, the more we have to leave behind us the simple evidence of the senses and of daily experience, and to move in that region of abstract thought which is gained by logical and scientific methods. Now it is well to note the great difference in the features which characterise the two ways of gaining and affording conviction. This difference can be shortly described by saying that the first, the simpler and the original method, is that of Sight, using this word in the larger sense of giving immediate evidence.

Things we see are, as it were, spread out before our mind's eye; they form a consistent and more or less permanent order. The mind is through them impressed by a totality, by an orderly arrangement through which it can at the same moment grasp the Whole and the various parts in their position in the Whole. The greater this grasp, or, as we called it before, the Synoptic View, the stronger is the conviction of the reality of the whole display. Breadth and clearness

combined with marked order are the commanding features of any aspect which in contemplating we consider to be real.

The marked feature of the second way of arriving at conviction is the strict logical connection in which single experiences, thoughts, or ideas stand to each other. It is not the broad expanse of view but the compelling train of thought which forces conviction upon us; the careful steps which are taken, the closely knitted chain of reasoning leading from one simple position to another, obliges us, willingly or unwillingly, to give assent. It is not the synoptic view and the large grasp but the analytic and carefully dissecting process, followed by an equally careful synthesis of single ideas, by which we are led on to the results. These not infrequently startle us by their strangeness, so that we hardly feel convinced, though we can find no fault in the process which has led us up to them.

The further civilisation advances, and with it knowledge and learning, the more complicated becomes the network of the many trains of reasoning which fill the mind. And, notably in the Sciences, these trains of reasoning have become so elaborate that they form as it were a world by themselves; one of those inventions of the human mind which testify to its freedom and creative power, and form one of the great features in the World of Values.

The prototype of such a network of close reasoning as we find in many of the separate sciences and in the region of historical criticism has always been the science of Mathematics. Out of a few simple data called

Axioms and Definitions, a stupendous edifice of purely abstract thought has been raised, and this construction has been successfully employed in ordering and enlarging natural knowledge.

The consequence of this wonderful creation of the human mind has been the prominence which scientific methods have acquired in popular estimation, even among many persons who are quite unable to follow in detail and practise these methods.

On all sides we now hear that problems in the most various departments of knowledge must be scientifically treated. And yet amid this frequently exaggerated cry for scientific method and higher criticism, one important fact has been often overlooked. No process of scientific or logical reasoning has proved lastingly convincing unless it has led to results which are in some form verifiable through the immediate evidence of our senses, including under this term not only the so-called physical senses, but also the emotions, desires, hopes, and, in general, the satisfaction of the higher as well as of the lower demands of human nature.

Thus, ever so ingenious a scientific theory, however plausible or enticing it may be made by its literary setting, will lose, in the long-run, its seductive charm if it does not lead to the discovery of facts which we can immediately experience, observe, and arrange within the existing order of knowledge.

Sight is everywhere not only the beginning, but also the consummation of every process of convincing thought. Only very rare minds occupying exceptional positions among ordinary men are capable of resting satisfied with purely abstract reasonings: the mul-

titude, even of highly intellectual and cultured persons, will never rest satisfied with pure abstractions, and certainly the great mass of mankind will always refuse to lose its foothold in the facts of everyday life and common experience.

Viewed in the light of these simple considerations, it seems unlikely that a purely reasoned creed will lead to visible results and practical efficacy. Neither the goddess of Reason, nor the *grand être* of Humanity, nor yet the Absolute of the metaphysician, will lead the masses to a living faith and a spiritual morality.

CHAPTER XVI.

REVELATION.

I.

Popular thought and the most abstract of refined systems of Philosophy have agreed in their varied and ever-repeated attempts to find some central conception or Idea in which to gather up their manifold trains of reasoning into a comprehensive view of the World and Life. Such a central Idea has always either avowedly or surreptitiously been endowed with the attributes of Personality. This circumstance testifies to and confirms the fundamental observation with which we introduced our whole discussion. We there stated that the first entry of the infant's mind into the world of Reality is to be found in its recognition of a personal existence.

Rising slowly out of the dimness and confused medley of purely subjective sensations, the well-defined image of a person started into clear relief on the background of the hazy and fluctuating horizon which we termed the firmament of consciousness.

This latter formed in contrast to the first clear object the accompanying surroundings, which, gathered up into an ever-present Something, figured in the

course of further mental development as the Self or I; a comprehensive though ever-changing and shadowy Whole in opposition to an outer Reality of defined and clearly-cut complexes of sensations which we term objects.

With this first and fundamental experience the veil was, as it were, lifted, and a clear glimpse afforded into what we learned to call the real world. We may, therefore, appropriately call this first stage of our entry into self-conscious life a Revelation.

In the course of further mental development many dim and confused sensations and experiences rise into similar clearness, and arrange themselves into groups joining the various orders of existence which either surround our limited physical Personality or exist in our mind as distinct systems to which we attach more or less Reality. None of these various experiences has striven so persistently to rise into clear vision and been so frequently checked as the moral sentiment.

Leaving out of consideration the origin and development of earlier civilisations as well as those of the Far East, and limiting ourselves to the history of our Western culture, it seems fairly certain that some form of social order under some moral Law preceded the growth and development of the other creations of the human mind which constitute what we have termed the World of Values. On the other side, we find that the whole of these creations has been imperilled or temporarily lost where such social and moral Order has been lost or rudely shaken.

It also appears that all beginnings of social and moral Order, as likewise its restoration, when seriously endangered, can be traced to the rise and influence of great Personalities. Notably that world of Ideas which is comprised under the name of the Christian religion, confirms on a large scale, and more than any other preceding or subsequent event, the two conclusions which we drew from the observation of the individual mind.

A sudden and unexpected appearance of a new social order, based on the simplest of moral precepts, and connected with a personal influence of a unique character, is seen to be the characteristic of the genesis and early growth of Christian life and thought — so much so that they have been thought to deserve, *par excellence*, the name of Revelation.

More than any other event in history have the simple yet mysterious beginnings of the Christian dispensation succeeded in raising to the high level of a great Reality those ideals of a moral and spiritual life which in many varied forms appeared in the pre-Christian civilisations without being able to establish themselves as a great world-power.

The whole of modern History has been influenced by the dominating force of this great structure of Christian thought and Christian life. It was subjected to the most virulent attacks in the earlier centuries of our era, and to relentless criticism in more recent times; it has not fallen, but steadily gained ground. It has been misused and perverted as an instrument for gaining and extending purely

worldly interests; it has not lost its inherent and fundamental spirituality. It has found room within its precincts for the development of the other creations of the human mind, such as Learning, Science, Art, and Society. After being nursed into full life, these have emerged from control and acquired seemingly independent existence: they have not exhausted that original fund of spiritual life which, in spite of this independent growth, still finds its home and centre in the primitive events and records of the Christian Church. It has been denounced as antiquated and superseded: it has always reasserted itself again.

The contemplating mind stands before it as before a great Reality which can be judged fairly only in its wholeness, but which like all great things threatens to crumble into pieces if we look only at single data, facts, and events, and try laboriously to put them together into the totality of a logical structure. It can, therefore, not be the task of a philosophical tract to describe or analyse in a few sentences the characteristics of this view of the World and Life. It is sufficient to say that intellects of the first order and large masses of unlearned persons have equally found in the Christian dispensation both the simplest expression for the Moral Law and the simplest confirmation of its imposing force as the Will and Command of a Highest Spiritual Power whom we call God. The human mind can only accept or reject it. The task of deciding falls upon every individual for himself whenever desire or doubt enters the soul. Scientific or logical proof is impossible.

A reasoned paraphrase of detailed Christian doctrine

will appeal only to those who possess their faith already. Such an attempt reminds us of the philosopher in the land of Laputa who grew sunbeams out of cucumbers, and succeeded in lighting the King's gardens during the daytime.

It may through the faultiness of all human reasoning wherever facts are in question, have a destructive rather than a supporting effect.

It is not from outside that a detailed exposition of the Christian view of the world and life can be attempted; it must come from inside, from those who have fully embraced the great subject and can speak out of the fulness of their heart and belief.

II.

The great body of Christian thought, together with the facts and events of personal and social Christian life, form a comprehensive subject, the exposition of which constitutes a special task—the task of Theology. This, like every other great subject, rests upon certain fundamental experiences of the human mind. Concisely put, these experiences are, the existence of a Moral Law and its supreme sanction. In the Christian view of the World this Moral Law has received a definite expression, not only formal as a mere command, but also substantial as the Law of Universal Brotherhood; and its supreme sanction is traced to the Will of a Highest Being or Spirit with whom the individual human soul stands in personal relation.

How these simple truths have been impressed upon

the human mind is a question of history equally important with the doctrine itself. What, then, is the task of the philosopher who is confronted with this great body of Thought and fact of Experience? None other than that which he is called on to perform when confronted with other departments of science or scholarship. His task cannot be to meddle with the internal work of the scientist or the scholar, both of whom have to find their own methods and expound their own results. Interference from outside, be it speculative or critical, does not avail; but the axioms upon which the comprehensive study of any subject is based are not only to be defined but also to be traced to definite experiences within the firmament of consciousness.

Beneath the existence of such experiences no human thought can penetrate. They form the ultimate data of consciousness.

Every separate region of Thought, such as Mathematics, Astronomy, Physics, Chemistry, Biology, or Psychology, is based upon definite facts of experience which can never be lost sight of. No one science or special way of approach has a right to assail or meddle with the foundations and presuppositions of any other, though it is possible that certain domains of thought may, in the course of their development, join hands and be merged into one more comprehensive region: this, for instance, has been the case with Biology, which now comprises the formerly separate departments of Botany, Zoology, and Physiology. Many thinkers believe that a similar coalition will eventually take place between Physics and Chemistry.

The reason for this change is to be found in the increase of Knowledge in these different departments of research, new facts being discovered to which methods and axioms have to be adapted.

Now here it may be noted that this change and development does not seem to apply in the same way to moral and religious questions. Notably the Christian doctrine has not changed in the course of its life from the simple statements and injunctions contained in its original records. Its history shows a repeated return to these original doctrinal and historical statements, and it is only in their application to practical purposes that a greater realisation is demanded and possible.

In this way the study of moral and religious phenomena in the light of the Christian view differs from that of other subjects. The data of consciousness, viz., a sense of right and a sense of obligation, have always existed so far as we can trace historically what we now call culture or civilisation. Nothing better has been said on this subject of the supreme rule of life than has been said in the gospel of Love. And even those modern systems which profess to disregard or discard the Christian Revelation have not been able to evolve any other or higher ideal than that of Universal Brotherhood.

A proof of this on an immense, not to say overwhelming, scale has been furnished in these days by the concerted appeal of allied peoples to the universally acknowledged dictates of humanity in opposition to the appalling disregard with which they have been treated by a large section of

statesmen and thinkers in the central countries of Europe.

Differing therefore from other sciences which present ever new problems and changing methods, the science of Ethics and the study of Religion are concerned with the same everlasting and unchanging problem. In this sense the work of the philosopher who studies the fundamental axioms and presuppositions of the different departments of human knowledge and practice would appear to be less varied and interesting when dealing with moral and religious phenomena than with those of Nature, History, and Society.

Yet, on the other side, a special problem arises whenever we approach the region which comprises these subjects. And this peculiarity leads to and justifies what we may call the Philosophy of Religion. To this we must now devote some attention.

III.

The relation of the Sciences of Religion and Ethics to Philosophy is more difficult to define than that of the other abstract, historical, or applied Sciences, and this for several reasons, of which the following are the most important.

To begin with, the relation of Religion to Morality is itself a problem which has not yet been solved in a way that is generally accepted. Further, the origins of the moral and religious sentiment, both in the individual human mind and in history, are more obscure and debateable than is the case in other regions of

mental life. More than in any other comprehensive doctrine are the philosophical and historical interests mixed up whenever we deal with moral or religious phenomena.

The exact or mathematical Sciences have in recent times almost entirely broken loose from historical tradition; so much so that text-books of Science become speedily antiquated; and a historical knowledge of the rapid changes in the fundamental axioms of any special science is almost entirely of philosophical interest, as is shown by the fact that great epochs in scientific research have usually started in opposition to traditional ideas, and have frequently been marked by the necessity of meeting determined attacks.

When we look at philosophy itself, we find just the opposite. Instead of its breaking loose from the past, the interest in older philosophy has enormously increased. After the end of that succession of original philosophical systems which in modern times began with Descartes and culminated in Hegel and Schopenhauer, we meet with a growing interest in the history of philosophy. Some renowned disciples of Hegel have almost exhausted their speculative powers in composing elaborate histories of ancient or modern philosophy.

Constructive efforts hardly exist, or are at best fragmentary, hesitating, or inconclusive. But if lastly we look at Religion, we find that it is wholly bound up with one great historical fact, that of the foundation of Christianity and the teaching of Jesus.

In fact, to many of us it would seem impossible to construct any religious view of the world and of life without an historical background. It seems impossible

to create that reverence which is inseparable from matters of Faith, if this is to be an active force, by any new construction, be this scientific, logical, poetical, or artistic.

The consequence of this is that the teacher of any spiritual morality or the student of Religion is forced to go back to the historical record of the birth of Christianity, and that no criticism—be it historical or speculative—has, in spite of its negative effectiveness, been able to point to any other fact or event as the possible centre of a living Faith.

Considering the great importance which the historical beginning of the Christian Religion possesses not only for the student and scholar, but also for all believers, it is imperative to define the attitude which the philosopher must take up in dealing with this side of the problem of morality and religion.

Is the unique character of the Christian Dispensation to be admitted, and if so, is it possible to approach the historical fact by the same methods as are used in historical criticism of other facts and events?

There can clearly be no valid reason for denying the right, or even the duty, to exhaust all means of criticism and investigation in dealing with the history of moral and religious phenomena. But the question arises, Are these methods adequate to grasp the phenomena in question?

Here we may look to the analogy with other regions of scientific and historical research. Let us take, for instance, Biology or the Science of Life.

In recent times a school of Natural Philosophers has arisen which proffers an attempt to limit the research

into the phenomena of life to a description and analysis of purely physical and chemical phenomena, and as these are supposed to be reducible to purely mechanical processes, Biology would, according to this programme, become a purely mechanical Science. It has, however, become evident to many acute thinkers that, though the discoveries on this line of research may be unlimited, they will nevertheless fail to exhaust or to reach the real essence of life. This is usually expressed by saying that the purely mechanical category must be supplemented by a vital category, which consists mainly in the study of the phenomena of life, not in isolation, but in their totality as represented in living organisms.

This was perhaps most clearly, and for the first time, stated by Auguste Comte, who insisted on the necessity of taking the *vue d'ensemble* in entering upon biological research.

This *vue d'ensemble* we have characterised in the foregoing as the Synoptic View, and maintained that it is a general aspect which applies to all phenomena whether they belong to lifeless, living, or conscious beings.

And when we proceed further in the upward scale, and reach the realm of animated and conscious beings, we have to add to the category of life that of personality, which in its turn superadds something to the category of life. And still further on, when we deal with personal existences, not only from the external but especially from the internal point of view, we again come to a graduated scale of mental categories, such as sensation, memory, attention, intelligence, and above these and other categories, we come to the moral and religious sentiment.

It is evident that the student of these highest powers which dominate the human mind has, whilst recognising the importance of all the lower categories, to start with the highest and most important, and place himself, as it were, in this centre of the Firmament of Consciousness.

IV.

We have in the preceding discussion repeatedly pointed to the fact that none of the mental categories or spheres of mental life are purely individual. We find everywhere that it is only through the intersubjective communion with other minds that the mental categories are developed and applied.

Nowhere is this communion with others of greater importance than in the moral and religious sphere. Though reason and even pure observation can be effectively exercised by secluded thinkers, it is nevertheless true that such seclusion is purely artificial and cannot avail to any great extent without a return into collective work and interests. But moral and religious interests cannot exist at all except in and through our communion with fellow-men; they are unthinkable and undefinable if taken by themselves and in isolation.

If this be so, it is clear that the centre of the moral and religious interest lies as much in the experience of the human race during past times, as it does in the individual itself.

Thus the student of Ethics and Religion must regard his subject from two equally important points of view: the awakening and growth in the individual mind of

the moral consciousness and the religious sentiment, and the awakening of mankind in the course of history to that full conception of the moral rule of life which was given in the Christian idea of love, not only as the Spirit which comprises all moral distinctions, but as also the essence of the Highest Reality.

In every truly Christian home the child is led up to the conception of what is right and wrong, and to the recognition of an Highest Authority which is above and beyond human persons, through many and diverse examples, through fable, stories, and true narrative, through example, encouragement, and rebuke. Similarly it seems to us that the pre-Christian era contains in its history many avenues, many lines of reasoning, many successful and many frustrated attempts to gain that clear definition of right and wrong and that view of the government of the Universe which are so simply and impressively taught in the Scriptures.

Both these developments—the individual and the historical — must be taken in conjunction, mutually supplementing each other.

Neither psychology and introspection, nor historical criticism and research will suffice, if taken by themselves alone. Together they form the method of a special body of research, which we may term Theology.

And there is another parallel between the life of the individual person and that of the Christian Society.

We expect from all persons whom we consider to be fully responsible that they shall have arrived during the years of adolescence at certain fixed principles of right and wrong which shall guide them in the further course of their active lives. This means a development

of character; and without the possession of some reliable character and of firm convictions, we do not consider any individual person to have attained full maturity. The moral character is not supposed to change as do scientific knowledge or principles of taste; it should serve as a firm foundation whereupon implicit reliance can be placed.

Similarly, we look upon the Christian view of the world and life as something settled, and so far as we can see incapable of further improvement. The applications of this view are endless, and at the present moment only very imperfectly achieved; but so far as the doctrine of love itself is concerned, nothing higher has been suggested or is even conceivable to the human mind.

This finality in the Christian conception of love is shared also by the Christian conception of truth. In fact truth and love are identified. We are shown in this identity not only the realised ideal of morality or the good, but also the realised ideal of knowledge. For according to this view, truth and love are not only the highest attributes, but also the very essence of the supreme Reality which we call God.

The pre-Christian world and profane philosophy ever since, and down to the present day, continually ask the question "What is truth?" For the Christian believer the answer is love; and this answer was given, not by any intellectual exposition, but by the life and death of Jesus.

V.

It cannot be the object of a philosophical treatise like the present to enter any further into the inside of the region of Christian or religious thought. This, as has been said before, constitutes a self-contained province of human life and interest, and is as little intelligible to outsiders as any other province of knowledge. Our object can only be to assign, as it were, to this region its location in the firmament of human consciousness.

What has been said here may however suffice to indicate the uniqueness of religion as conceived by Christianity, and the impossibility of understanding it by purely logical forms of thought.

This latter fact is usually described as the mystical or miraculous character of religious belief.

On these two points, the uniqueness and the miraculous character of the Christian Faith, we may make a few remarks from the purely philosophical point of view.

Conflicts between Science and Philosophy, between Philosophy and Religion, and between Science and Religion, have nearly always existed, ever since each of these regions of interest gained independence and strove to establish distinct orders of reality for itself. From the point of view which we have tried to establish we have encountered no difficulty in conceiving of different degrees and orders of reality.

We have seen that they are reached by the endeavours of the human mind to raise the various kinds of experience out of the purely subjective state of

existence to greater clearness and to make them communicable to our fellow-men. We have tried to assign independent sources for this process of development in various clusters of our primary experiences. Thus we found the material for scientific thought in those experiences which are possessed of the spatial character.

The primary material for mathematical and logical thought is in the relations of number and abstract conceptions; the material for art is in the various forms of order, both in space and time; and lastly, the material for ethical and religious thought is in the sphere of emotions and desires. As these different classes of experience are tolerably distinct within our primary individual experience, there should be no difficulty in safeguarding their relative independence when raised to the level of Reality and at the same time showing their mutual interdependence. This latter is really the special task of philosophy, which has to establish some order or arrangement between the different spheres of human interest, such as each of these has to establish between the different data with which it deals. Thus the philosopher must possess in the highest degree that synoptic faculty which Plato described as the *sine qua non* of the dialectician.

In more recent times the conflict which formerly existed between the exact and the philosophical sciences seems on the point of being amicably settled, it being recognised that the former have to choose their own methods and point of view, whilst the latter have to make these methods themselves a special subject of study.

But the conflict between the exact and the natural

Sciences on the one side and Ethics and Religion on the other has not grown less in the course of the development of modern thought, and it forms in consequence a special subject for independent philosophical examination.

The causes which have led to a better understanding, and so to say, to a clearer division of labour between Philosophy and Science are not difficult to find, and in stating them, we shall at the same time be able to see why the conflict between Science and Religion is harder to settle.

To show this we must revert to the part which words and language play wherever human interests become or strive to become common property and cease to be purely individual.

The ambiguity of words makes an understanding between different persons difficult, and the beginning of exact knowledge may be traced to the process of substituting for words things — *i.e.*, those definite thoughts which we call sensations, and which have a fixed location assignable in the outer world of space and time. Where things with definite names do not suffice, we resort to figures, models, or signs and symbols. The reason why the mathematical Sciences are the most exact, and in consequence the most convincing, is because they have gradually emancipated themselves from the ambiguity of speech and the tyranny of words and have invented a language of their own.

In this language, be it that of number, measurement, or spatial arrangement, the exact sciences are able to posit their fundamental data and their fundamental axioms. This process of definition leads to two

separate lines of research: the application of these axioms, which forms the content of the various sciences, and on the other side the examination and criticism of these data and axioms with special regard for their completeness and the limits of their use, which form the study of philosophy.

Now morals and religion have not been able similarly to invent a language of their own, or have done so only in a very imperfect manner; though there are a limited number of words in every civilised language which refer specially to moral and religious things, they are not capable of the same clear definition.

In order to communicate to others our feelings, convictions, or desires, we have to borrow words and terms from those more definite regions of thought which have invented them for their own purposes.

On examination it will be found that nearly all the words we employ have their origin in definite sensations with a spatial definition. There is only one exception to the general correctness of this remark, and this is to be found in the special language which is based upon sound: musical sounds in their harmony and melody have no reference to the outer world of space, but in and through them we are able to communicate to others and enjoy with them our feelings and emotions; and this is the reason why they are peculiarly adapted to form the language of the emotions.

Nor is it the least noteworthy of facts that as the world has grown tired of the attempt to intellectualise and put into philosophical language spiritual things,

the art of musical composition has been increasingly cultivated and has more and more appealed to large numbers of persons of all ranks of society.

There are indeed, as just said, a few words in all languages which have become the means of intercourse between cultured persons and which point to something higher than, and outside of, the material world, but their definition is extremely difficult, if not impossible; and in using them we always appeal to an inward and unconscious response which cannot be otherwise awakened except, perhaps, in that silent worship which is being more and more recognised as the means of bringing together the thoughts of an assembled congregation and directing them towards that Higher Spiritual Reality which we in vain seek fully and adequately to express in words.

VI.

The unique character of the Christian view of the World and of Life, as distinguished from other creeds and systems of morality, both religious and philosophical, is nowhere more evident than in the way in which it treats the contradictions and difficulties of the common-sense view of life.

Neither science nor philosophy has been able to remove these difficulties. Knowledge of whatever kind still bristles with paradoxes. In fact these have become rather more evident through scientific and philosophical criticism.

It would be an interesting task to collect all these

paradoxes, beginning with the simplest and most abstract, and ending with the most complicated provinces of thought. Here it may suffice to mark only a few of them.

Our entry into self-conscious life brings us face to face, as we have already shown, with one of the greatest of paradoxes,—the existence of other persons and what we philosophically term the category of personality.

Personality, as we have seen, has two sides, popularly termed the outer and the inner, or the world of things, and the world of thought.

The world of Thought in its most primitive as well as in its most highly developed form contains everything that exists for any one of us individually. There is really no way of getting out of this circle. But on the other side, the outer world contains every individual person within its totality as a definite but almost infinitesimally small and seemingly negligible thing.

This paradox, which is characteristic of personality, but which cannot be logically construed, finds a place in the Christian Doctrine of the essence of the Highest Being. God is represented both as *in* and *above* the World. This is the Doctrine of the Immanence and Transcendence of the Divine Being. This view is indeed not peculiar to Christian Doctrine, but it is contained in the Scriptures as a truth without any attempt being made to explain it logically.

The only proof is the fact of the Incarnation itself; the twofold nature—the Divine and human, of the Founder of Christianity.

But there is a yet greater difficulty and a more perplexing paradox in human nature, and this is not so much in the intellectual as in the moral world. This is the problem of evil, and still more the contrast of Determinism and Freedom. Looking at life from one point of view, we are more and more forced to see a necessity in all events, and the scientific view of nature which includes human individuals in its purview leads us to seek for every event or action a determining cause, leaving as it were no room for freedom of choice. Thus also, in dealing with the conduct of other persons, or ourselves, it seems nearly always possible to show that in antecedent and surrounding circumstances a compelling reason may be found for just that which has been done or happened. On the other side, as soon as we individually attain to the idea of Right we are forced to admit the possibility of Wrong. This comes home to us in the early experience of self-reproach and remorse which follows upon certain of our thoughts and deeds if we review them after they have been entertained or committed. This experience necessitates us to conclude that we might have thought or acted differently, and the reproach which we cannot get rid of involves the idea of freedom or liberty of action. The wrong then appears not only as a failure in doing what was right, but as guilt or sin; and further, as something in our nature which we must strive to get rid of. Evil in this form of sin strikes us thus as being both inherent in our nature, and on the other side also as something essentially foreign to it, the power of which we

desire to conquer. This paradox in human nature is fully admitted in the Christian view of life. The passages in the Scriptures where evil and sinfulness are treated as something inherent in human nature, are probably about as numerous as those in which sin is looked upon as a sinister power which enters into and corrupts the human soul, but which ought to be and can be expelled and conquered: in fact the prominent, practical character of the Christian Religion is this—that it shows how this conquest of evil has been actually carried out and how it is possible.

Christianity is thus one of the Religions or Schemes of Redemption, but it is the highest among these, as it contains the record of the supreme and only instance where this has been fully accomplished.

VII.

The view that the Highest Being is both in and outside of the world, and the equally important doctrine of evil and sin, as something which is both inherent in and foreign to human nature, mark the two great paradoxes which cannot be explained or solved by the intellectual process of human thought. Nor does the Christian view attempt this solution by an intellectual process; the solution is given in a fact or an event, the greatest event in history. As Goethe said, "The insufficiency of this world leads up to an event."

It is therefore quite natural that the Christian view of

the world and life should be looked upon as irrational, and that many attempts have been made to rationalise it.

These attempts have signally failed, because no actual fact or event can be fully comprehended or even described by the categories or forms of thought which the human mind is capable of. It can only be seen or experienced. This irrational character is the main characteristic of the mystical, mysterious, or miraculous nature of Christian history and Christian thought.

It may be useful to examine more closely what is really meant by these terms, and wherein consists the repugnance with which many thinking persons view them.

The miraculous can mean one of two things or both: it may mean that which is unique in its occurrence, which has no parallel in present or past experience; or it may mean that which is contrary to human reason, inasmuch as we cannot think of it consistently.

Now so far as the first point is concerned, the argument of Hume is unanswerable; this argument says that if any unusual event is reported to us, it is always more likely that the reporter should be mistaken than that something should have happened, the like of which is not known ever to have happened before. Of course the unusual, and still more the unique, event stands by itself, and as we judge of the probability of events by their fitting into the order of other events which we have experienced, we have every reason to doubt the correctness of the report.

It is only through repetition that we become aware of things at all, and that which is unique stands outside our ordinary means of judging. But this does not in

the least mean that unique events cannot happen; indeed it will be found that no fact either in history or in the range of individual experience, if examined closely, is ever exactly like other facts. And if this be true of individual occurrences, it is still more true when we consider complexes and combinations of many facts and events.

Now the Christian dispensation taken as a whole is so complex and contains so many features that it cannot be judged by any single occurrence or testimony, but must more than any other event be considered as a whole; not only in its history, but also in its importance for us at the present time, and more than all, in relation to the fact that it is the only comprehensive view dealing with all the difficulties which we encounter whether we accept the answers and solutions it gives or reject them.

As to the second feature which characterises the miraculous, namely, that it is unthinkable; this can arise from different sources. It may be similar to the idea which a man born blind forms of sight and colour; such a sense must be to him quite unintelligible, and were it not for the overwhelming testimony of his fellow-men, it would be miraculous. This form of the miraculous is connected with the limits of our positive experience.

Another form of the unintelligible is this—that we have to think of two things together which we cannot unite in one thought. Thus we cannot think of anything being square and round at the same time. Still another form of the unintelligible is that an event contradicts what we term the "laws of nature." It arises from the fact that certain regularities or uni-

formities in the outer world have become so habitual to us that we cannot think them away. But it is quite evident that this is only a matter of habit, and that we have really no ground for believing that we know what we term the "laws of nature," or that any such laws exist at all which can be expressed in human thought.

Against all these objections to what is called the miraculous or inconceivable, it cannot be too often urged that many quite inconceivable things happen daily which we nevertheless do not call miraculous, but which receive this epithet as soon as we seriously try to understand them. Thus to the mechanical philosopher, to the determinist and necessitarian, Free Will is a miracle, that is, unthinkable. But equally miraculous though continually occurring are many natural phenomena. A whole list of these could easily be written down. It may suffice to point only to such facts as the beginning of a separate individual life or the inheritance of mental characteristics. Yet these things happen every day and are not considered miraculous.

VIII.

In the case before us the two attributes of the miraculous — viz., uniqueness and logical inconceivability—are united as in no other event in the whole history of mankind.

If we look more closely not at the history of mankind but at that of every one of us individually, we meet with an event which is equally unique and logically inconceivable from whatever point of view we may

regard it. There is certainly no occurrence in the whole of our remembered or unremembered existence which is like that of our gradual awakening to a consciousness of not-self and self, nor is it possible even to describe the different stages of the process by which this entry into conscious life occurred. It remains a fact which is shrouded in darkness and vanishes in the *chiaroscuro* of our earliest remembrances. If it were not for the fact that we see around us numberless other instances which we by an analogy with ourselves interpret as similar to what has happened to us, the beginning of our conscious life would remain a unique event to which there is no parallel. In fact it is, as stated above, truly a revelation, a lifting of the veil.

Now we have seen in the course of our reflections that the development of consciousness depends on our relation not only with one or two other persons but in its further stages with a society of human beings which surrounds us. Not only have we received from another or from others the first impressions of conscious existence, but it is only owing to our appropriating the accumulated experience of others present and past that our mind has grown and developed into full life.

The most of that which we call Ourselves is a collection of thoughts, aspirations, and desires, which we have in various degrees assimilated from and in common with human beings who surround us or preceded us, most of whom are not even known to us. The collective life thus becomes the true life of every one of us, even if we live a secluded existence and fancy that we can live alone.

The life of mankind or Humanity thus becomes in

our thoughts the most important occurrence in the whole world, both physical and spiritual.

This life of the human race develops, as we learn from history, in a way not dissimilar to that of our individual minds. Its beginnings are similarly involved in darkness; no definite records exist in the memory of mankind regarding the origin of Society and its various stages of progress. Only after long ages of existence, passing through changes and events of which there is no record, has mankind in different ways and at different places gradually awakened to self-consciousness, to feelings of responsibility, and the seriousness of life.

As the moral character of the individual man grows imperceptibly to himself and others from small and tender beginnings, frequently through uncertainties, failures, and doubts, into fuller existence during adolescence, so also the moral and intellectual life of mankind shows many fluctuations, failures, tentative beginnings, and gleams of higher light which we term inspiration.

Is it likely that the fuller awakening to the meaning of life, the highest rule of conduct and the essence of Reality, should in the course of history be recorded in clearer terms than those of our individual lives? Is it not to be expected that this final awakening or revelation should be shrouded in similar mysteries, and contain events of a unique character which refuse comparison with ordinary events of daily life in the past or present, and are inexhaustible by the categories of purely logical thought and construction? The fact that Humanity has received what professes to be a highest and unalterable rule of life and a name for the highest

Reality, both being identified in the Christian conception of Love, is a fact which must be contemplated as a whole, and, as such, accepted in faith or rejected. Neither logical nor historical proofs as they may exist for the ordinary recurrent events of life are here of any avail.

There is for those who accept this Revelation only one other proof possible, and that is their own experience of the workings of this faith in their own lives and in those of their fellow-men.

No philosophical reasonings, no historical criticisms avail either to generate or to destroy this faith—it stands and remains as a fact by itself with no parallel in the whole range of other experience.

CHAPTER XVII.

SUMMARY AND CONCLUSION.

I.

In dealing with Religion and Revelation, we have approached the highest philosophical problem — the problem also which is of the greatest importance in the present day.

As stated already, it is not the special teachings of Religion nor the things revealed to us which we desire to discuss in Philosophy. It is only the position of these spiritual realities within the circle of human interests, their location, as it were, on the chart of the mental firmament, that we desire to mark out clearly; leaving it to every individual mind to work out the details for itself, and for a special body of doctrine, appropriately called Theology, to try to bring some unity and order into the totality of these spiritual verities.

The points of view from which we started should enable us to direct our reflections upon many other topics and throw some light upon other interesting problems of the world and life. But, having touched on the highest problem, I feel that I must not accompany my readers into further possible lines of thought.

It remains, therefore, only to bring to a close what has been said by a few remarks which may furnish a short summary of the results we have arrived at. We started with the position in which Hume had left the study of the human mind or human nature, and adopted a line of thought which professes to be not a refutation of Hume's position but a further development of the course of inquiry initiated by Descartes and Locke, and carried forward by Berkeley and Hume himself. With him a certain point was reached where his inevitable scepticism led to an attitude which proved both in theory and in practice to require refutation or correction.

It does not seem to have occurred to any one to push Hume's method — which was nothing but the plain historical method of his forerunners—further on, and apply it to other ideas, tracing their genesis in the human mind in the same way as they did with the two fundamental notions of Substance and Causality.

But this is exactly what we have attempted—tentatively and imperfectly—in the foregoing chapters.

With this intention we dwelt notably on two points where we seemed to discover the possibility for this further development. There may be other fruitful ways of overcoming Hume's scepticism without departing from the main course of British philosophy, but we have limited ourselves mainly to two, the discussion of which does not seem to involve that break of continuity of thought which is usually considered to mark subsequent philosophy both in this country and abroad.

II.

The first remark which we had to make about Hume's treatment was this: that Hume dealt with single perceptions or ideas and not with their actual connection as presented in our experience. It seemed necessary for us to note the recurrent connections and groups in which sensations or perceptions appeared in the primordial experience of the mind. These recurrent clusters or complexes of sensations stand out clearly on the background of the changing firmament of consciousness. Among these we noted as probably the earliest appearance of this kind the figure of a person or persons, and further on of lifeless things.

The infant's mind becomes in this way familiar with a detached world consisting of separate things which stand out and force themselves on attention and memory. This experience leads, in the further course of our early life, to fixed clusters or arrangements of sensations and perceptions possessing both totality and individuality. The mind learns to look at things as coherent groups forming an *ensemble* or "Together," each with its own individuality or separateness.

There still remains the background of our total experience at any moment, and this we learn to distinguish by the term Self, in contrast to the definite things which, as it were, stand out both within and against it.

In the second place, we noted that though this process would lead to the notion of the contrast of Object and Subject, it would not be sufficient to generate the idea of reality and unreality; both the things

which stand out on the background of our total experience, and this background itself, being equally existent. This led us to the investigation of the possible processes through which the mind may arrive at the distinction of the real and the unreal. The principal difference between the real and the unreal we found in the fact that sensations or perceptions which we call real are those which we have in common with other persons. This led us to recognise the importance of communion with others, which communion and communication became most impressive and efficient through language and speech. The child's mind gradually settled down to the recognition of a world which it had in common with others in contrast to that which it possessed for itself alone.

The attribute of reality is, however, not attached by us exclusively to what we call the outer world, though *prima facie* this figures as the most obtrusive reality of which we have any knowledge.

These two points led us on to a further development in our course of reasoning.

We dealt first with the second point—the problem of Reality. We tried to fix the attributes which mark for us the difference of the real from the unreal, and were, in the further course of this attempt, led to distinguish different orders and degrees of reality. Further on we were led to enlarge the conception suggested by the first point just mentioned, and recognised that what we termed the Synoptic view is a general aspect which stands in opposition to the combined analytic and synthetic processes with which we become familiar in the earlier years of mental

instruction, and still more exclusively in the schools of science and criticism.

We were led to the study of Arrangement and generally of Order, and discovered that the Synoptic view and ordering process of the human mind created or revealed a new and higher form of reality which we termed Value.

Through special processes of Arrangement or Order, Nature, as well as the human mind, endows real things and real experiences with that higher reality which not only appeals to the analytic and synthetic tendencies of scientific and practical thought, but satisfies also the emotional—æsthetic, ethical, and religious—claims of the human soul.

This being in outline the course of our discussions, we may now conclude with some further reflections which will bring our results into connection with some prevailing tendencies in modern and in recent philosophical thought.

III.

The view which we have tried to gain is distinguished not only from the common-sense view of the world, but also from that aspect which has formed the basis of many philosophical systems both in ancient and in recent times. This aspect starts with an axiomatic belief in the contrast of the outer and the inner world. The axiom has found expression in such antitheses as Nature and Mind, Body and Soul, Object and Subject, the two substances called Matter and Spirit, &c. This contrast has entirely disappeared for us: we recognised

only one Reality for each and every human mind, this being the total changing content of its consciousness. This we termed the field or firmament of Thought. It is the only Reality of which every one of us is really aware, and beyond which his knowledge cannot take a step. We have not called it real but only existent, as it has no negative and cannot be thought away. We reserved the terms Real and Reality for a portion only of this total existent, for that portion which has an opposite or a negative, and which we can dismiss from our thoughts. In consequence of this view, the ordinary difficulties of explaining the relation between Outer and Inner, Body and Soul, the extended and the thinking substance, and many affiliated problems, have entirely disappeared for us.

If we adopted the terms Outer and Inner, we found the Outer lying entirely within the Inner World, and we found it improper to look for the Inner World within the precincts of the Outer, though we were able to explain how this persistent attempt is suggested by the fact that for the purposes of practical life we early accustom ourselves to look at everything as spread out in a surrounding space in which other persons as well as ourselves figure only through their outer or physical appearance, and in which there is no room or location to be found for the large expanse of the Inner World of Sensations, Thoughts, Feelings, &c.

The term Substance is replaced in our view by the term Together: all single sensations or mental experiences of any kind which appear coherent and repeat themselves in groups acquire some degree of Reality, the most obtrusive but not the truest Reality being

that of outer things which we term Material. From these we distinguish likewise only through their coherence and partial continuity the things which we call Mental or Spiritual, and then we speak of a spiritual substance variously expressed as Self, Mind, Soul, Spirit or Ego.

From our point of view as just stated, this Together or *Ensemble* of conscious experiences—or if we like to call it so Spiritual Substance—contains the Totality of all seemingly external or real things, and hence also their illusive substantial or separate existence.

We have seen that a large amount of useful scientific and practical thought can be carried on whilst limiting ourselves to that portion of existent things, that is, of subjective experience, which we have termed the Outer World. In fact, in proportion as we can remove from this the background of what we may term sentiment or the fringe of emotion, we learn more of the Real and penetrate into the secrets of Nature with a corresponding increase of knowledge and useful application. And yet we find that this detachment cannot be completely carried out. Even to the purely external view, the phenomena of this detached world of things reveals occurrences and instances where the principles which have been established and successfully applied in our research appear wanting. This is most striking when we deal with living and, beyond these, with conscious things, that is, with organisms and human beings.

And even the lifeless world in its totality forces us to recognise some hidden principle which has been variously expressed in the natural sciences. We found this to consist in some form of order or arrangement.

The conception of order introduced us into quite a new world of ideas: for not only did we find this order in the existing world, but we recognised that the mind itself possesses the faculty of creating or rather of adding to the existing order of physical and mental things, facts and events, a new order which may be that of art or morality or of both. Thence we saw that the mind creates a new world which we term the world of Values, and which we recognise as a higher degree of Reality than what is usually termed the Outer World and is studied by scientific methods.

In this way we came to recognise three degrees of Reality; the lowest degree being that of mere existence in consciousness, the next that of external or objective Reality, and the highest degree that of valuable or interesting Realities and experiences.

This highest region of Reality, the truly Real, is a creation or discovery of the human mind in which the latter shows its freedom. We may therefore term it also the world of Freedom. In it the mind rises from mere awareness or simple consciousness to an intellectual contemplation, and further to a spiritual enjoyment of its original and primitive endowments.

All this may be expressed in other terms, which will bring our reflections nearer to a view that has frequently presented itself in past and recent philosophic thought. We may say that the first stage of conscious experience of the human mind, both in the individual and the race, is a "going out of itself," the recognising of other persons and things. Though more and more absorbed in them so as to become partially or even at times wholly forgetful of itself, the mind

recognises at the same time in or behind the objective world which stands out on the background of consciousness something corresponding to or identical with its own primordial nature. This is the world of other minds.

For the purposes of this life this absorption in outer things is indispensable, and constitutes for every one a large portion, and for some the whole of their occupation. Only a few specially gifted minds moved by their own irrepressible promptings can be enabled consistently with some social order to cultivate what we may call an inner life. Into this they may succeed by personal influence in introducing their fellow-men, founding or enlarging the sense of that higher Reality in which the external and objective world returns again into the surroundings of an emotional existence.

IV.

The partial or total absorption in the objective world, its things and events, is, however, itself not entirely without that spirituality which we are erroneously tempted to identify with things of the inner life. For, according to our view, the objective world does not cease to be at the same time subjective. If not immediately present to the senses, it lives on in memory and the workings of imagination; and it is only through these inner processes that an intellectual view of the outer world can be gained.

The scientific view of nature, including the physical phenomena of the human person, is itself a creation of

the mind. It is only possible where a purely subjective or personal interest exists, and this interest has itself various degrees, ranging from the lower demands of our sensual instincts through the promptings of material interests, such as wealth and position, to the higher level of curiosity and love of knowledge and truth for their own sakes. Or, we may find the higher spiritual interests working in the application of knowledge for the benefit of others in the relief of pain and suffering, and in conquering, through the diffusion of knowledge, the carnal and selfish tendencies of our lower nature, which are always ready to drag us down if higher powers are not on the watch.

But the highest form of mental activity is reached only if we start instinctively from the moral—including the æsthetical—demands of the mind, and if we can rise to that eminence from which these alone appear to have the fullest reality, giving through their growth and increasing sway all that is of real and abiding value to the other higher or lower pursuits of humanity.

In this region of thought, the True, the Beautiful, and the Good are immediately revealed by Sight, bearing testimony that these verities are real essences, and not, as it were, mere fragrant effluvia of the material or even the intellectual worlds, compared with which they have no truly real existence.

This triadic movement of thought from the lower through an intermediate to the highest stage has received expression in various forms both in ancient and in modern thought. The form which has become best known in recent times is that elaborated in the idealistic systems of German philosophy, which cul-

minated in Hegel. In these systems neither Thought nor Reality is conceived to be ever at rest, but each phase leads on to something different from or other than it appears to be, and the other or higher phase of existence which is reached leads, as it were, back again to the original content which then presents a higher aspect.

In Hegel's words, the subjective mind leads on to the objective, and this by a union with the subjective rises to the Absolute mind.

This formula has been used by Hegel and his followers with signal success to explain and interpret many developments in the various regions of human life and interest.

From what we have learnt in the foregoing, it is not difficult to see that this triadic movement has its foundation in the original constitution of the human mind which starts from a chaotic state of experience through definition, differentiation, and selection, to a clear view of single things and events which it recognises as a real world; and that in the further course of its development this real world is again taken back into the region of the Emotions and Feelings where it gains interest and value, revealing the existing order of nature and mind as well as creating a new and higher order which culminates in the Spiritual view of the world and life.

This being, according to our view, the real meaning and truth which is contained in Hegel's "Inherent Dialectic of Thought," it may be of interest to inquire how it came about that Hegel himself has been so frequently misunderstood, and that his doctrine

has led to so many different and even opposite interpretations, being on the one side extolled beyond measure as the highest and last possible step in the evolutionary process of Thought, and on the other side virulently attacked, and represented as a delusive and dangerous doctrine.

V.

Many influences worked together in the development of Hegel's mind, which, more perhaps than that of any other philosopher, passed through various stages, repeating those that are marked in the history of German Idealism by a succession of brilliant and independent thinkers.

One of the most important of these influences was that of the Kantian philosophy, which had allied itself with the exclusively rationalising process which governed the eighteenth century, with the desire of leading thought out of the dangerous and subjective regions of the sentimental and the mystical into the clear daylight of logical definition. Hegel repeated in a more elaborate manner the process which Socrates in ancient times employed in the refutation of the Sophists and Rhetoricians of his age. In fact, he attempted to fix the meaning of those abstract terms which we employ in dealing with the elusive phenomena of the inner world.

He followed Kant in establishing an independent philosophical science which in recent times was by one of Hegel's own pupils termed *Erkennt-*

nisstheorie, in English "Theory of Knowledge" (Epistemology).

This separate treatment of the phenomena of human thought has its ultimate origin in the fact that in the course of ages a distinct and unique structure of thought has been built up which defies criticism, is based on self-evidence, and excludes almost entirely that admixture of error and ambiguity which appears to be common to all other regions of human inquiry.

This structure is the language of mathematics, which deals only with definite quantities in Space, Time, and Number, and is originally based upon spatial relations, without which neither numbers nor intervals of time could be clearly fixed, on which probably also all logical and abstract distinctions are ultimately dependent. This explains why all the great thinkers who have employed the dialectical method have in one form or other betrayed a great liking for the mathematical sciences, and have frequently introduced mathematical methods into their discussions. Kant maintained that true science exists only so far as mathematics can be introduced.

Hegel himself was not a mathematician, but he desired to introduce into philosophy the same strictness as had been obtained in mathematical doctrine by the use of simple definitions, self-evident axioms, and the processes of formal logic. Recognising that formal logic could not deal with the higher content of abstract thought, he attempted to create a higher logic which would be capable of doing this. Had he joined to his purely logical distinctions likewise

the plain historical method of the British School of Thinkers, he would have been able to put the great truth which is contained in his Philosophy into plainer and less ambiguous language.

This great Truth is the assertion that all Reality is ultimately Thought, using the word in its widest sense, including every mental experience, beyond which nothing can be known to any individual human mind, though through the co-operation of many minds Thought can not only be fixed and generalised but also indefinitely extended so as to present to the individual human mind a Reality which transcends enormously the small fragment accessible to any single mind.

This creation of the collective human mind is duly recognised by Hegel. It is only in the historical development of Thought, *i.e.*, in a living process, that the true life and contents of the mind can be discovered. Hence the importance which the History of Philosophy acquired in Hegel's system and has never lost in subsequent philosophy, whether that of followers or opponents of his special doctrine.

The Hegelian philosophy presents both historically and philosophically many aspects, and much can be said about it according to the special aspect we choose. After having beneficially influenced some of the best German scholarship, though not of the best philosophy, during the second third of the nineteenth century, it was in turn taken up by French, Italian, British, and quite recently by American speculation.

Its most prominent effect on German speculation

was a reaction. This sprang up from various sides, but that which supervened and gradually attained the foremost place in German thought and certainly reached the widest circle, was that of the exact and natural sciences. They joined hands with the rationalising tendency of Hegelian thought.

For those who, like the author of this "Fragment," became acquainted with German philosophy shortly after the middle of the century, three schools of thought claimed special attention, and all three could be traced back to Hegel. These three schools may be identified with the names of Feuerbach, David Strauss, and Karl Marx. They represented severally or jointly materialism, destructive criticism, and purely economic Socialism, and agreed in their anti-religious bias.

These most prominent results of Hegelian rationalism created in the minds of those who strongly disapproved of the doctrines a marked prejudice, amounting almost to an aversion towards Hegelianism;[1] and this in the case of the author led to a study and appreciation of the only two original philosophies which could at the time be said to possess a living force. These were the philosophy of Schleiermacher, a rival of Hegel, and that of Lotze.

The current popular philosophy of materialism had the advantage of being put forward in a clear and simple style which contrasted favourably with that of Hegel.

[1] This attitude was further encouraged by the impression which, rightly or wrongly, existed in many minds that Hegel had identified himself with the detested police system of Prussian Government, which earned for the latter the name of *Polizei-Staat*.

In the several foreign countries where Hegel was studied, the defects just mentioned were less noticed. Notably in this country, scholars, trained in the severe study of Aristotle, were not deterred by stylistic difficulties. They were attracted not by the formalities but by the spirit and ideal of Hegel's speculation; but they also recognised that his work would have to be done over again in order to reach the end and aims which he and they had in view.

Unfortunately, as it seems to us, their labours took the form of a hostile criticism of their own native philosophy as represented by Hume. Against this we have tried to show that progress on the lines of British thought must necessarily lead to a discussion of those highest problems which Hegel had placed in the forefront of his discussion: the problem of Reality, and of the truly Real. Inasmuch as this has been attempted in the foregoing chapters, they may claim to offer a contribution to the solution of the problem which at the present moment occupies many minds in many countries, and has through recent events attained not only a speculative but an equally great practical importance.

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